User Manual for Electronic Emissions Reporting Software in Aviation

Manual for operators and verifiers

Umwelt Bundesamt

DEHSt
Deutsche Emissionshandelsstelle

Impressum

Publisher
German Emissions Trading Authority (DEHSt)
at the Federal Environment Agency
Bismarckplatz 1
D-14193 Berlin
Phone: +49 (0) 30 89 03-50 50
Fax: +49 (0) 30 89 03-50 10
emissionstrading@dehst.de
Internet: www.dehst.de/EN

Status: Month yyyy
English by: Nigel Pye, npservices4u@gmail.com

Cover image: Tkemot/ Shutterstock.com

This User Manual was created by the German Emissions Trading Authority (DEHSt) at the Federal Environment Agency with the necessary care and thoroughness, for the users of the electronic emissions reporting software in 2013. DEHSt assumes no responsibility for up-to-datedness, correctness, completeness or quality of the information in the manual.

DEHSt assumes no liability towards the manual's users or third parties who have obtained knowledge about this manual or parts thereof. In particular DEHSt accepts no liabilities towards third parties. The disclaimer does not apply in cases of intent or gross negligence or when damages result from injury to life, body or health. DEHSt only accepts liability according to the principles of state liability pursuant to § 839 of the Civil Code in conjunction with Article 34 of the Basic Law.

This manual provides technical assistance. It has no prejudicial effect on the application of law and confers no legal rights.

Content

1 Introduction and Structure of the Manual 5

2 The Basics of Using the Application 5

2.1 Application Structure and Scope 5

2.2 System Requirements 6

2.2.1. Operating System and Web Browser 6

2.2.2. Acrobat Reader 6

2.2.3. E-mail Program 6

2.2.4. ZIP Program 7

2.2.5. Web Browser Settings 7

2.2.6. Firewalls 7

2.3 Safety Aspects 8

3 Process Flow and User Roles 8

3.1 Process Flow 8

3.2 User Roles 9

4 Registration, Login and Logout 10

4.1 Registration 10

4.1.1. Setting up a User Account 10

4.1.2. Forgotten Passwords 12

4.1.3. Edit a User Account 12

4.1.4. Delete a User Account 12

4.2 Login and Logout 12

5 Instructions for Using the Application 14

5.1 Language Selection 14

5.2 Application Structure 14

5.2.1. Start Page 14

5.2.2. Data Browser 15

5.2.3. Operating the User Interface 16

5.3 Notes on Data Input 19

5.4 Validation Checks 20

5.5 Working with Interfaces 20

5.5.1. Attach and Read Additional Documents 20

5.5.2. Creating PDF Files 21

5.5.3. Export 23

5.5.4. Export as a ZIP file 24

5.5.5. Import 24

5.6 Transfer of Editing Rights 25

6 Creating and Completing Emissions Reports 26

6.1 Creating a Report from the Monitoring Plan 26

6.2 Completing a Report 28
6.2.1. Tabular Display in Forms 28
6.2.2. Adding Data Detail Using Partial Imports 32
6.3 Transferring Reports 33
7 Examination by the Verifier 34
7.1 Report Examination 34
7.1.1. Data Transfer from the Operator via Editing Rights Transfer 34
7.1.2. Examination of the Operator‘s Information and Attachments 34
7.1.3. Request Additional or Missing Information 35
7.1.4. Preparation of the Verified Report 35
7.2 Requests for Corrections and Additions 35
7.3 Verifizierter Bericht 36
8 Submission to DEHSt 36
9 Troubleshooting 37
9.1 General Assistance 37
9.1.1. Starting the Software 37
9.1.2. Registration and Login 37
9.1.3. Data Browser 37
9.1.4. Creating a Report 37
9.1.5. Displaying Tooltips 38
9.1.6. Completing Relevant Fields 38
9.1.7. Editing Data in the Tables 38
9.1.8. Deleting a Report 38
9.1.9. Converting into a PDF file 38
9.1.10. Transferring the Editing Rights 38
9.1.11. Saving a Report 39
9.2 Assistance with the Operator’s Potential Problems 39
9.2.1. Import of Data 39
9.2.2. Importing Detailed Data from an XML File 39
9.2.3. Forms 39
9.2.4. Checking the Report 39
9.2.5. Calculation of CO_2 Emissions 40
9.2.6. Attaching Documents 40
9.3 Assistance with the Verifier’s Potential Problems 40
9.3.1. Deleting the Verifier Fields 40
Glossary 41
Index 43

1 Introduction and Structure of the Manual

This manual is intended to provide instructions for aircraft operators and verifiers in how to use the reporting software to create CO_2 emissions reports (emissions report). The manual explains the data collection procedures and how to use the software.

The German Emissions Trading Authority (DEHSt) at the Federal Environment Agency provides technical guidance on the preparation of CO_2 emissions reports for reporting annual emissions or the transport performance of an aircraft operator. The guidance can be downloaded from the DEHSt website.

Note:
The i icon identifies additional information that is not absolutely necessary for using the software.

Attention:
The ! icon identifies particularly important instructions for using the software.

2 The Basics of Using the Application

This chapter presents a summary of the application's structure and scope. In addition, general topics such as system requirements and safety aspects are described. This chapter is important for both aircraft operators and verifiers using the software.

2.1 Application Structure and Scope

The reporting software used for creating emissions reports is based on a form management system (FMS) and can be accessed via the Internet (https://www.formulare.dehst.de). The software can be used without further local installation. For more information about system requirements, see Section 2.2. The applications are based upon the respective monitoring concepts. For instance, the monitoring concepts „Annual emissions" must already have been recorded before the emissions report can be created.

Attention:
The inputs to the emissions reports are based on the respective monitoring concept inputs. Basic data in the monitoring concept cannot be changed in the report.

A common user management exists for both applications. For more information about aviation user management see chapter 4.

The concept of the user's role allows for easy data exchange between aircraft operators and verifiers. The function „Transfer the editing rights" in the relevant report can be used for this purpose. Thus aircraft operators and verifiers can work at different times on the same report, but the aircraft operator or the verifier can only see the other role's entries in the "read only" mode.

After logging into the user interface, you can manage different emissions reports in your personal area. Editing a report can be interrupted and resumed at a later time. Data already recorded are stored on a central server to which DEHSt has no access.

Attention:
The web browser navigation bar is not required for managing the software while recording the emission and tonne-kilometre reports, and it may cause loss of data if used under certain circumstances. Its use during data input is therefore not recommended.

In some cases, departures from the usual web browser functions occur when using the FMS. These departures are explained in Table 2.

Table 1: Departures from usual web browser functionality

Action	Comment
Back	It is not possible to return to the previously displayed page using the „Back“ button within the software; the message „Attention: page has expired“ appears.
Refresh	Refreshing the page via the web browser function „Refresh“ only reloads the last page displayed. Unsaved data may therefore be lost!
Leaving the website	Upon leaving the website, for example by entering another web address in the web browser’s address bar, all unsaved data will be lost. **Attention:** There is no warning or confirmation prompt before leaving the website!
Start page	The „Start page“ button of the web browser navigation bar opens the homepage set up locally by the user. This is identical to leaving the website. **Attention:** The „Close“ button in the reporting software forms should not be confused with your browser’s „Start page“ button because if you mistakenly leave the website via the browser’s „Start page“ button, all unsaved data to be lost!
Save	The web browser’s „Save“ function does not result in saving the report data. Data entered can only be saved using the „Save report“ button.
Print	Printing via the web browser’s print function only displays the current view of the browser window. Please use the Print button in the application to print all forms.

2.2 System Requirements

The application is provided centrally via the Internet. It is not necessary to install any special software or perform updates. A web browser and a permanent internet connection are only required during data input.

The default screen resolution is 1024 x 768 pixels. If the screen resolution is smaller, the application is only partially displayed on the monitor.

2.2.1. Operating System and Web Browser

The application is independent of the computer’s operating system since it runs within a web browser.

The following web browsers in their current versions are generally suitable:

- Mozilla Firefox
- Internet Explorer

Depending on your web browser type and version, the presentation may be slightly different, but the software function is not affected.

2.2.2. Acrobat Reader

Acrobat Reader from Version 6.0 is required to view and print PDF documents.

2.2.3. E-mail Program

An operational e-mail program is helpful for informing the recipient of editing rights. The following email programs are suitable:

- Outlook,
- Outlook Express,
- Thunderbird.

2.2.4. ZIP Program

The emissions report sent by the verifier contains compressed data in the form of a ZIP archive that must be extracted for reading. The following programs are suitable for extraction:

- WinZip,
- 7-zip,
- Power Archiver,
- Zip.

2.2.5. Web Browser Settings

Web browsers can usually be configured by the user according to personal needs. The settings are different for each browser. Browser settings that may affect the function of the reporting software are described below.

Cookies

Most browsers place restrictions on writing so-called cookies. Allowing cookies is not mandatory, but recommended. It is sufficient to allow cookies just for the session.

Note:
Cookies are pieces of information that are written by the server onto the user's hard drive. The reporting software only sets a temporary cookie with an identifier labelled as a session ID. Based on this identifier, the server can assign each user his data. When you exit, the cookie is deleted. If the use of cookies is not allowed, the session ID is attached to the URL. The latter method is, however, somewhat more susceptible as regards data security.

Pop-up Blockers

If you call lists via the ... button and no selection window is displayed, please check if a pop-up blocker is enabled in your browser. A pop-up blocker may even prevent printing when using the PRINT button PDF. Depending on the web browser, there are various ways to allow the use of pop-ups. If your browser supports this, please allow the use of pop-ups for www.formulare.dehst.de. For more information on this, please refer to the help function in your browser.

JavaScript

Some features of the reporting software use JavaScript. If your browser does not support JavaScript or you have disabled the use of JavaScript, these functions will not be available. These include the display of tooltips, hints on missing or incorrect form entries and the automatic re-loading of the page when selecting an entry from selection lists. Re-loading of the page can also be manually triggered via the web browser refresh command, but please first manually save the latest entries.

However, allowing the use of JavaScript is recommended.

2.2.6. Firewalls

Firewalls are frequently used to prevent unwanted external access to a network. To protect an individual computer, so-called personal firewalls can be installed. Please make sure that your firewall configuration allows access to the reporting software. Contact your system administrator for that purpose.

Note:
The HTTPS protocol is used exclusively for communication between the web browser and the central server. Outgoing connections therefore use port 443.

2.3 Safety Aspects

In order to guarantee secure use of the application, the data you enter is encrypted using HTTPS. Furthermore, a private space is provided for you when you create a personal user ID. Your data will be stored in this protected area. Only you have access to this space using your unique User ID and password combination. To protect your data, you should never pass on your user ID and password to third parties.

The verified emissions and tonne-kilometre reports provided by the verifier are signed, qualified and sent to the operator via the Virtual Post Office (VPS).

Attention:
It is recommended that you create regular local backups of your own reports. The procedure is described in Section 5.5.3.

3 Process Flow and User Roles

This chapter describes the preparation of emissions reports using the reporting software, and explains the underlying role concept.

3.1 Process Flow

Figure 1 shows a schematic of the reporting flow and can be found at the beginning of each chapter.The entire process flow is divided into the three groups of participants (operator, verifier and DEHSt). Each step of the process denotes the respective chapter in which more detailed information can be found.

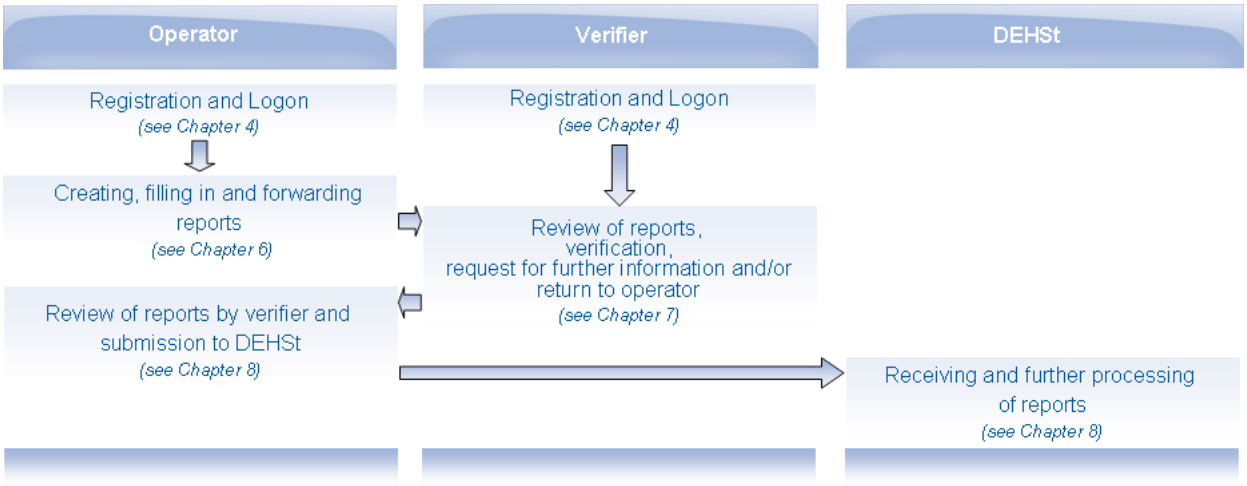

Operator
Verifier
DEHSt
Registration and Logon
(see Chapter 4)
Registration and Logon
(see Chapter 4)
Creating, filling in and forwarding reports
(see Chapter 6)
Review of reports, verification, request for further information and/or return to operator
(see Chapter 7)
Review of reports by verifier and submission to DEHSt
(see Chapter 8)
Receiving and further processing of reports
(see Chapter 8)

Figure 1: Reporting flow

The operator generates a report using the reporting software. After completion of the reports, the operator passes the reports to the verifier. The verifier examines them and adds verification information. If any information is missing, the verifier may request it from the operator. Upon completion of his examination, the verifier sends his reports back to the operator via the Virtual Post Office (VPS) . The operator then transmits them to DEHSt, also via the VPS.

Figure 2 shows the necessary process steps at a higher level of detail. The individual steps are picked up again in later chapters and described in detail. On the right side you can see in which process steps the FMS or the VPS needs to be used.

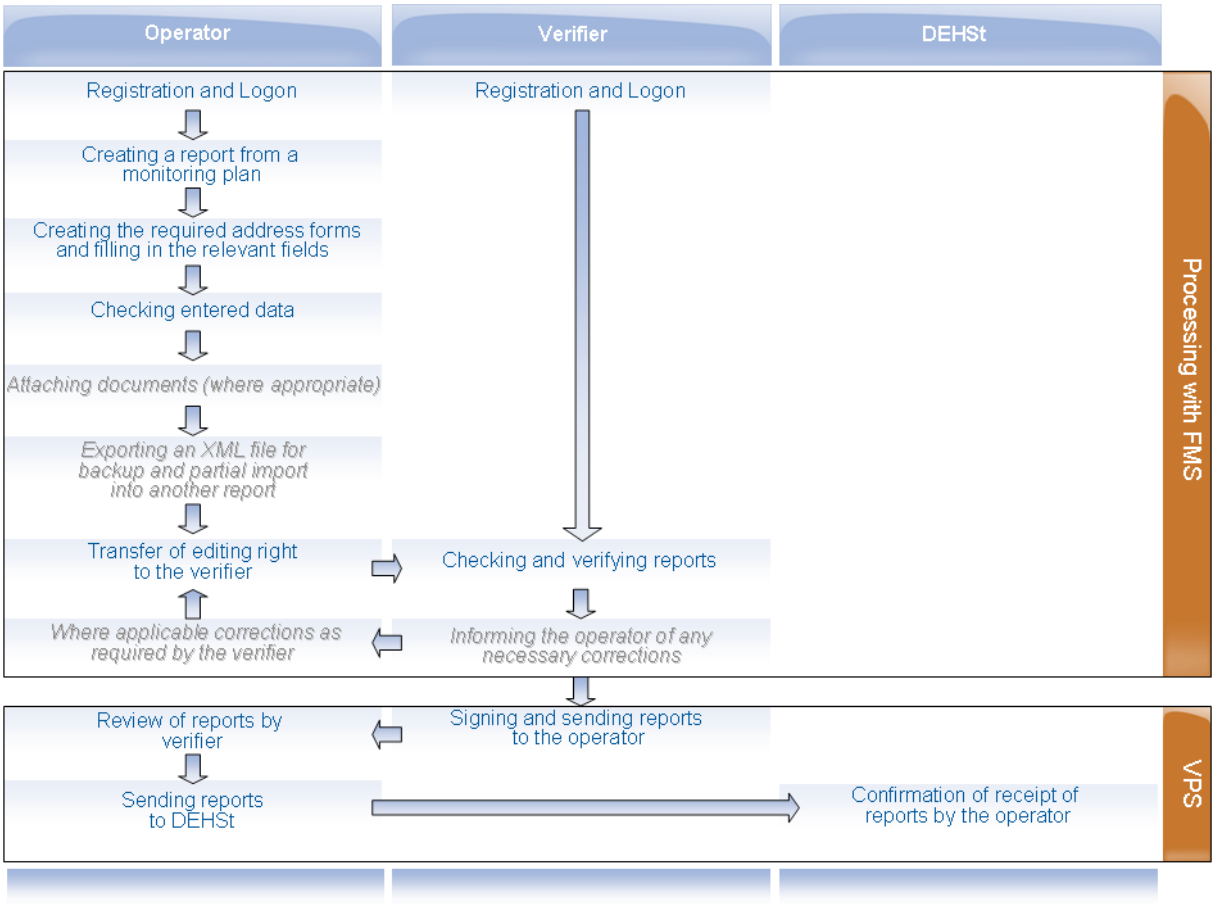

Operator
Verifier
DEHSt
Registration and Logon
Registration and Logon
Creating a report from a monitoring plan
Creating the required address forms and filling in the relevant fields
Checking entered data
Attaching documents (where appropriate)
Exporting an XML file for backup and partial import into another report
Transfer of editing right to the verifier
Checking and verifying reports
Where applicable corrections as required by the verifier
Informing the operator of any necessary corrections
Processing with FMS
Review of reports by verifier
Signing and sending reports to the operator
Sending reports to DEHSt
Confirmation of receipt of reports by the operator
VPS

Figure 2: Detailed reporting process

3.2 User Roles

The reporting software is used by both aircraft operators and verifiers. Each user has a unique role (operator or verifier) within the software. Operators and verifiers are assigned specific permissions within the software according to their respective tasks in the preparation of the reports. Table 3-1 shows which functions can be used by the participants in the creation, verification and delivery of a report.

Table 2: Role concept – roles and permissions

Permissions within the software	Role	
	Operator	Verifier
Create reports	x	
Import reports	x	x
Select reports	x	x
Add and delete forms	x	
Enter data	x	x
Close a report	x	x
Verify records	x	x
Save a record	x	x
Adopt data details from an XML file	x	
Output report as a PDF file	x	x
Export as an XML file (local backup)	x	x
Export as a ZIP file		x
Transfer editing rights	x*	x*
Delete own reports	x*	x*

Permissions within the software	Role	
	Operator	Verifier
Delete data entered by verifier		x*
Add and remove attachments to the report	x*	x*

* Only possible if the user has editing rights

The users define their role themselves when registering, and can only use functions associated with the chosen role.

4 Registration, Login and Logout

The first steps in recording emissions reports are system registration and login. There is common user management for aviation applications. Within these, you can set up a user account for the reporting software. The user account only needs to be set up once and is then valid for all aviation applications (monitoring plans and reports). Within user management, you can change your profile or renew your password if you forget it.

Attention:
If you already have access to the Monitoring Plan Annual Emissions or Tonne Kilometre Data applications, please also use it to access the software for electronic reporting of CO_2 emissions.
It is the only way to ensure that you have access to the monitoring concepts you have already created.

Because of the common user management, you can use the access you have created to access all aviation applications. See also Section 4.2.

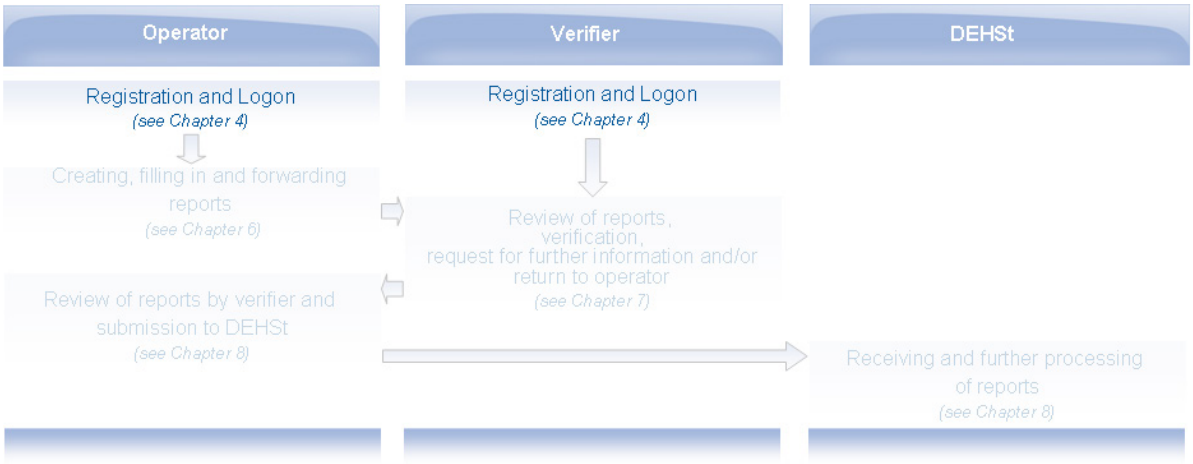

Operator
Verifier
DEHSt
Registration and Logon
(see Chapter 4)
Registration and Logon
(see Chapter 4)
Creating, filling in and forwarding reports
(see Chapter 6)
Review of reports, verification, request for further information and/or return to operator
(see Chapter 7)
Review of reports by verifier and submission to DEHSt
(see Chapter 8)
Receiving and further processing of reports
(see Chapter 8)

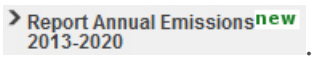
Figure 3: Reporting flow

4.1 Registration

Before using the software for electronic reporting of transport services and CO_2 emissions, you need to register. Below you will find a description of the processes for creating, editing and reusing user IDs.

4.1.1. Setting up a User Account

The start page opens when you open your web browser and enter the address www.formulare.dehst.de: „Federal Environment Agency - German Emissions Trading Authority (DEHSt)“. Click on the link for the aviation applications.

In the left menu you will find the entry 

.

You will be redirected to the login page of the emissions reporting software. You can now create a user ID using the registration function.

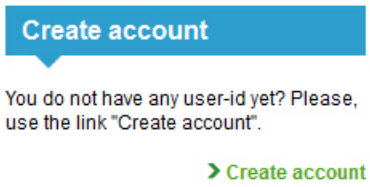


Figure 4: Registration dialog box

Click on the following link Create account

To register you will need:

- a login name (user ID) of your choosing
- a password
- a valid email address and
- an alias of your choosing.

Note:
The alias is the unique identifier for users within the FMS and is used in the transfer of editing rights (see also Section 5.5).
Because the login name is part of the user ID, for security reasons the alias should not match the login name.
Please pay attention to upper and lower case.

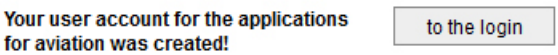
A form called „Create user account“ will open prompting you to provide personal information such as first name and last name. After entering your user ID and the alias, the system checks to see if these are already present in the system and therefore cannot be assigned again.

You can choose your password freely. It must consist of at least eight characters and contain at least one special character and one number. Passwords are case-sensitive.

If you have forgotten your password, the email address you specified will be used to send you a message to create a new password (see Section 4.1.2). When transferring the emissions report's editing rights, the report recipient can be notified of the transfer at the registered email address. We therefore recommend you update this email address when it changes.

If you do not complete all of the required fields during registration, you will get an error message during data confirmation, and the missing field is highlighted in red. In order to create your user account, you must also acknowledge and accept the terms and conditions of the software. To protect your emissions report, you should not disclose your user ID and password to any third party.

After having confirmed your entries by pressing the Confirm data button, generation of your access is confirmed with the following text:



You can now leave the „Set up user account“ form by clicking “to the login”. You will be redirected to the software login page and can log in with the user ID you just created.

Note:
Your newly created user ID is valid for all current and future applications of the aviation form management system.

4.1.2. Forgotten Passwords

If you forget your password, you may click on the › Forgot your password? abutton on the login page to request a new one. The following are the required steps:

- After pressing the button you will be transferred to a form where you are asked to provide your username and email address.
- After entering your data, click on the request button.
- If your entries are correct, you will receive a confirmation message „An email was sent to the above address. Please check your mailbox!“ The email you receive contains a link which you must click on.
- A form will open in your web browser window where you can specify a new password. Press the save button.
- You will receive confirmation which reads „Your password was changed successfully!“
- Exit the form using the to the login button.
- You will be redirected to the software login page and can log in with your newly changed password.

4.1.3. Edit a User Account

To make changes to your user account, you must first log in to the reporting software.

On the left side of the homepage you will find the › Changing Log-on data button in the menu bar. After pressing the button, you must re-enter your user ID and password to log into user management. After editing the data, you can confirm your entry by clicking on the save button on the toolbar or on the save button.

4.1.4. Delete a User Account

To delete your user account, you must first log in to the reporting software. In the menu bar on the left side of the homepage you will find the › Changing Log-on data button. You must then re-enter the user ID and password to log in to user management.

Before you can delete your account, you must have deleted all the reports that you created, or have returned the editing rights to the author of other reports. If you have fulfilled these requirements, you will see the ✕ symbol on the toolbar in the „Edit account“ form. Click on the symbol and confirm the deletion.

Note:
Since your user ID is valid for multiple applications, at the time of account deletion, no reports, notices or requests may be present in the other applications.

4.2 Login and Logout

After you open your web browser and enter the address www.formulare.dehst.de the start page opens. Select the FMS application for aviation.

In the left menu bar click on › Report Annual Emissions 2013-2020 new

You will be redirected to the reporting software login page for emissions reports (see figure 5).

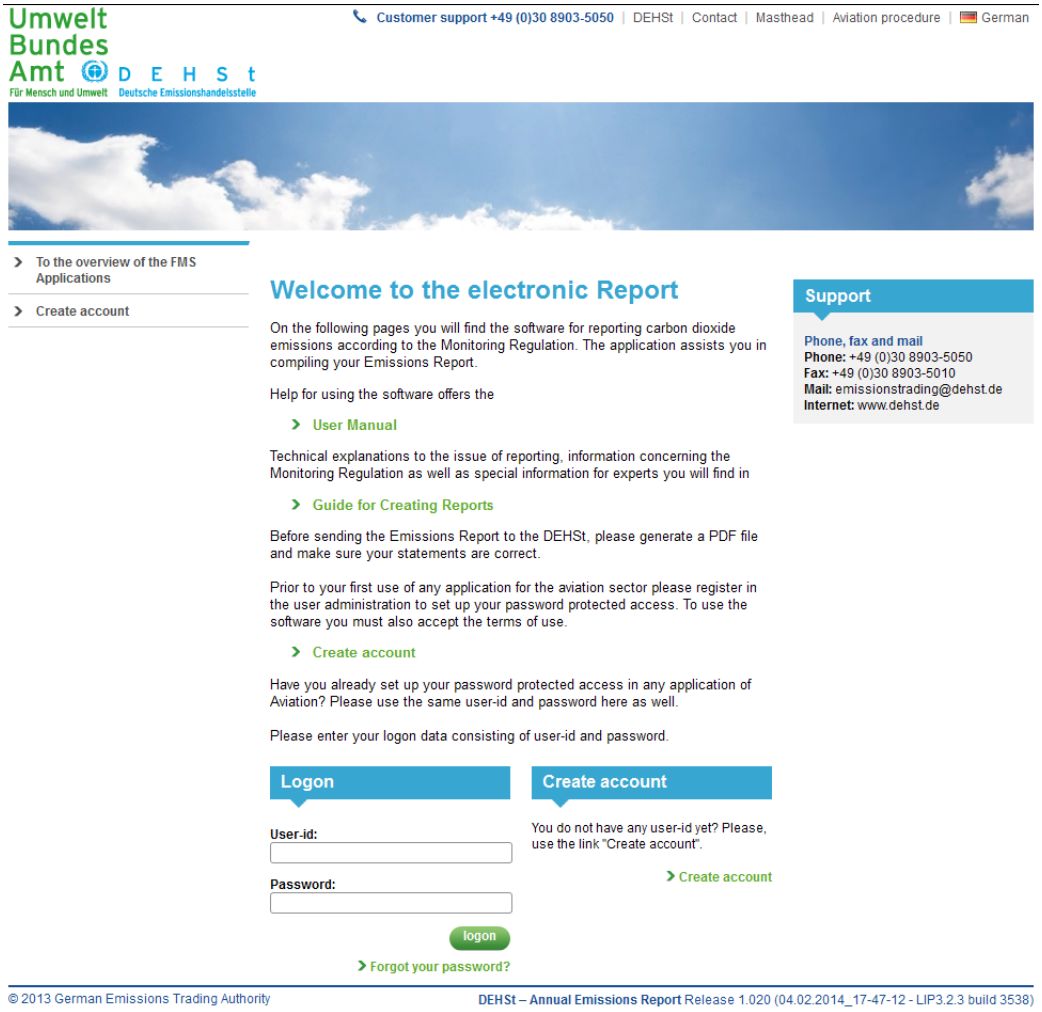

Umwelt Bundes Amt
Für Mensch und Umwelt
D E H S t
Deutsche Emissionshandelsstelle
Customer support +49 (0)30 8903-5050 | DEHSt | Contact | Masthead | Aviation procedure | German
To the overview of the FMS Applications
Create account
Welcome to the electronic Report
On the following pages you will find the software for reporting carbon dioxide emissions according to the Monitoring Regulation. The application assists you in compiling your Emissions Report.
Help for using the software offers the
User Manual
Technical explanations to the issue of reporting, information concerning the Monitoring Regulation as well as special information for experts you will find in
Guide for Creating Reports
Before sending the Emissions Report to the DEHSt, please generate a PDF file and make sure your statements are correct.
Prior to your first use of any application for the aviation sector please register in the user administration to set up your password protected access. To use the software you must also accept the terms of use.
Create account
Have you already set up your password protected access in any application of Aviation? Please use the same user-id and password here as well.
Please enter your logon data consisting of user-id and password.
Logon
User-id:
Password:
logon
Forgot your password?
Create account
You do not have any user-id yet? Please, use the link "Create account".
Create account
Support
Phone, fax and mail
Phone: +49 (0)30 8903-5050
Fax: +49 (0)30 8903-5010
Mail: emissionstrading@dehst.de
Internet: www.dehst.de
© 2013 German Emissions Trading Authority
DEHSt – Annual Emissions Report Release 1.020 (04.02.2014_17-47-12 - LIP3.2.3 build 3538)

Figure 5: Login page

After entering your user ID and password you can go to the reporting software homepage by clicking on the logon button. A more detailed description of the structure and the functions on the home page can be found in Section 5.1.1.

If the password is entered incorrectly three times, your user account will be blocked. The block will be automatically cancelled after 15 minutes. Please try again. If you continue to have difficulty logging on, please contact DEHSt Customer Service to reactivate your user ID.

Note:
After you have been inactive on the login page for more than two minutes, the message „The authentication was cancelled because of inactivity.“ will appear, and you have to re-enter your data.

To log out of the software, select › Logoff in the right menu bar.

5 Instructions for Using the Application

This chapter contains useful information on using the application including the user interface's structure and other important functions. Specific aspects of data input, the implemented tests and instructions for time-displaced editing are a few key points in this chapter.

5.1 Language Selection

The reporting software supports communication with aircraft operators and verifiers in both German and English. You will first need to select the language in your web browser. The language settings can be changed in the menu using the German or UK national flag buttons both before and after login. Both buttons can be found in the header at the top right of the screen edge.

As long as your selection remains within the left menu bar (see figure 6), the language can be changed manually at any time.

After you have created or imported a report and while still within the forms section, the language of the created report cannot be changed.

The language of the report is determined by the language of the monitoring plan on which it is based (see also Section 6.1).

Note:
You also can select a language via the country flags in the user management. The language of the homepage can be changed manually via the corresponding buttons at any time.

5.2 Application Structure

The homepage will open on opening your web browser and entering the address www.formulare.dehst.de. Please opt for the aviation FMS applications.

Click on > Report Annual Emissions new 2013-2020 in the left navigation bar. You will then be redirected to the reporting software login page for emissions reports. You have the option to use an existing user account or create a new user account by clicking on the > Create account button. For more information on setting up a new user account, see Section 4.1

Please enter your user ID and password in the fields provided and confirm by clicking the logon button to access your personal area.

5.2.1. Start Page

If the data you entered on the login page are correct, you can proceed to the start page. If you have chosen an operator role during registration, you will see a menu bar for creating, selecting and importing emissions reports (see figure 6) on the left side. If you have registered as a verifier, you cannot access this menu item > Create Report .

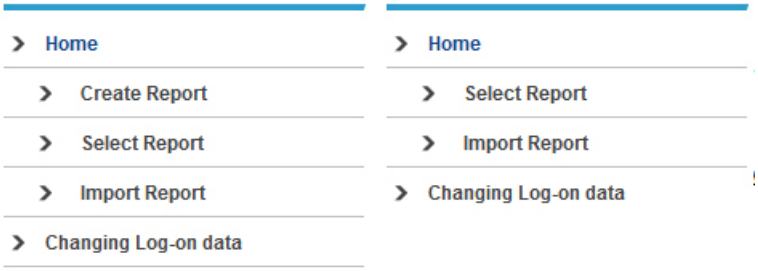


Figure 6: Left menu bar for the role „Operator“ (left) and „Verifier“ (right)

Using the left menu bar you can call-up different functions of the software. The individual functions are explained in Table 5 1 below:

Table 3: Functions of the left menu bar

Menu entry	Function/Comment
Start page	After logging in, please go to the start page. Here you can select from the various options on the left menu bar.
Create report	Here you arrive at the page where you can select the relevant reporting year. Having selected the correct year, a data browser opens in which all accessible monitoring plans are displayed. Please select the monitoring plan suitable for your emissions report. Subsequently, an emissions report that contains selected data and structures from your monitoring plan will be created and opened. The menu item > Create Report is available to operators only! Reviewers do not have access to this menu entry.
Selecting a report	The menu item > Select Report takes you to the data browser. All emissions reports accessible to you are displayed here. Please select a report to view or edit in the data browser. (For details of the data browser, see Section 5.2.2.)
Importing a report	The menu item > Import Report will redirect you to the „XML Import“ page. By specifying the file path (location of the XML file on your computer), you can import a locally saved emissions report into the system. For further details on importing emissions reports, see Section 5.4.
Editing a user account	You can customise your access and personal data at > Changing Log-on data . For example, if your email address has changed (see also Section 4.1.1).

A second menu bar can be found at the screen's top edge. This is visible on every page regardless of the user role. It contains the entries „Customer service“, „DEHSt“, „Contact“ and „Editorial information“ (see figure 7). The above entries refer to the relevant page on the DEHSt Internet portal.

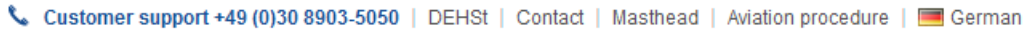


Figure 7: Top menu bar

5.2.2. Data Browser

Clicking the > Select Report button in the left menu bar takes you to the data browser. The data browser displays all reports previously created by you and the reports to which you have editing rights, in tabular form (see figure 8). If you have not yet created, imported or received any reports for editing, no data will be displayed under the table header and, instead, you will receive the relevant hint. You can open the relevant report for editing by clicking on a table row. If you have already transferred the editing rights, you are only allowed to view your reports in read-only mode, i.e. inputs cannot be changed. For notes on editing rights, see Section 5.6.

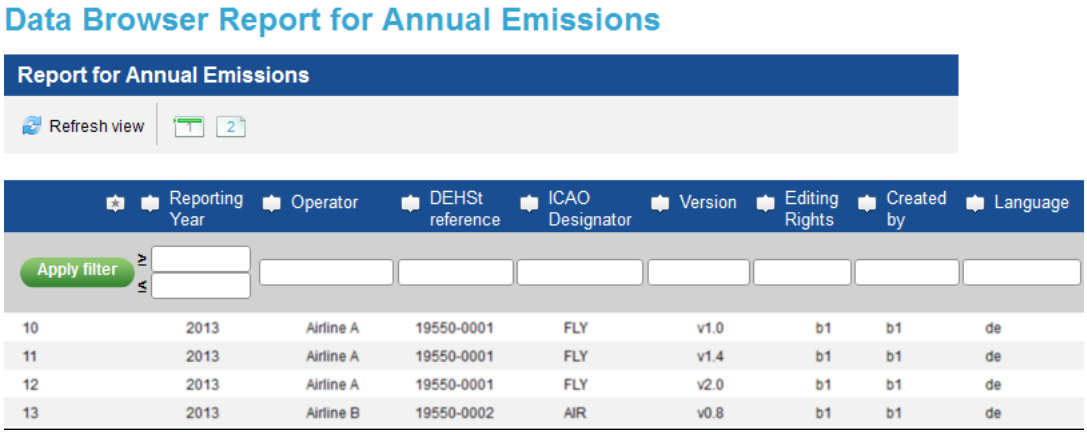

Data Browser Report for Annual Emissions
Report for Annual Emissions
Refresh view
Reporting Year
Operator
DEHSt reference
ICAO Designator
Version
Editing Rights
Created by
Language
Apply filter
10 2013 Airline A 19550-0001 FLY v1.0 b1 b1 de
11 2013 Airline A 19550-0001 FLY v1.4 b1 b1 de
12 2013 Airline A 19550-0001 FLY v2.0 b1 b1 de
13 2013 Airline B 19550-0002 AIR v0.8 b1 b1 de

Figure 8: Data Browser

Emissions reports can be sorted in the data browser using the sort button according to the respective column. The button sorts in ascending order while the button sorts in descending order. The original order can be restored by clicking the restore button.

The data browser can span several pages. 15 records per page will be displayed. You can navigate to other pages using the buttons. These are only displayed when several pages are available. The view can be updated by clicking the refresh Refresh view button found above the table.

Note:
The results list can be narrowed by entering a search term in the corresponding row. Please enter „%“ in front of your search term to search across all applications, otherwise the term at the beginning of each individual entry will be searched for. Now press the „Filter“ button.

5.2.3. Operating the User Interface

If a report has been selected via the data browser or a new report has been created, the report opens with various functional areas as shown in figure 9.

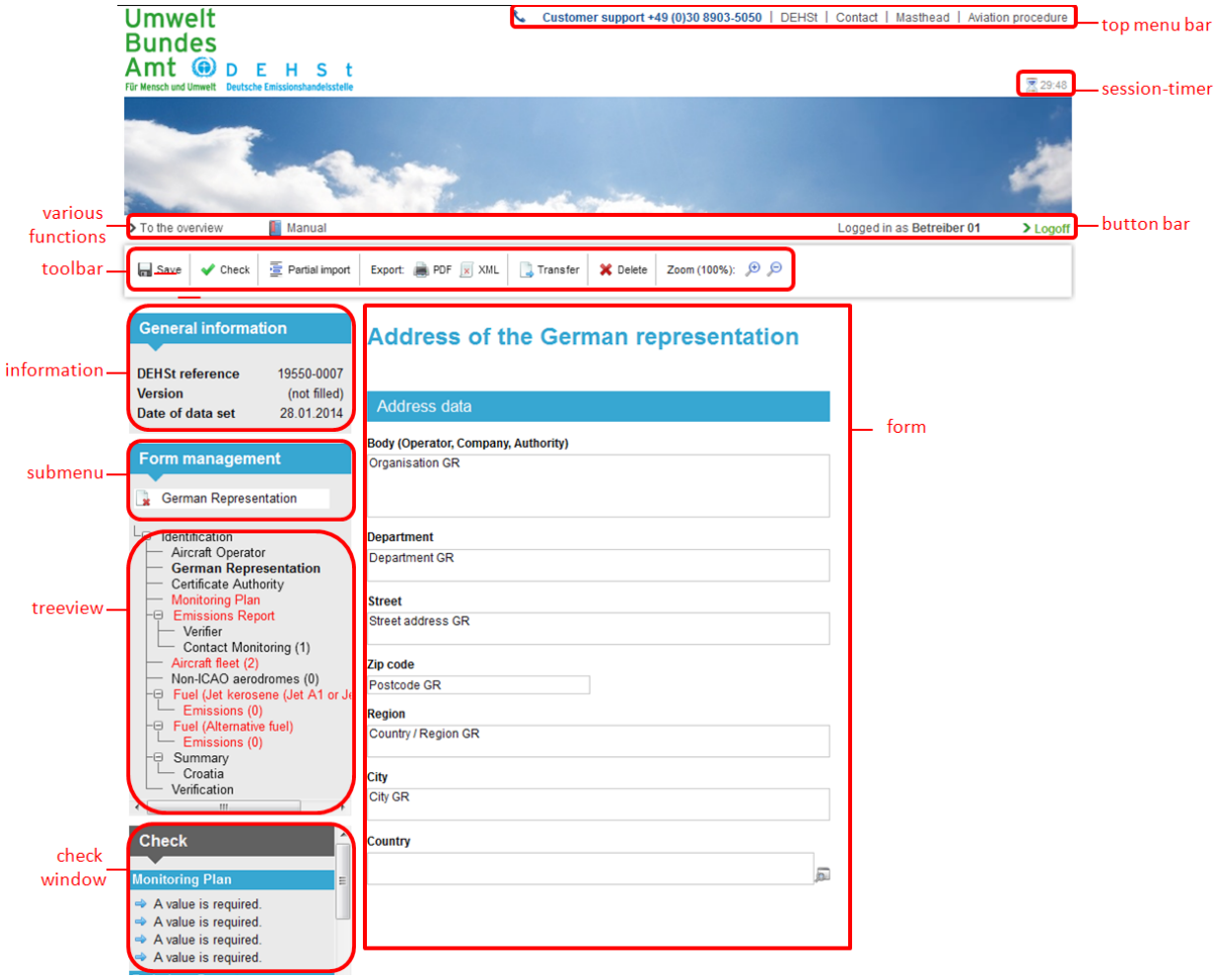


Figure 9: Report

The individual functional areas of the report are described in the following sections.

Form

Data are entered into template forms within an emissions report. The forms usually consist of several pages, which can be accessed via the page navigation buttons above and below the form area. Depending on the requirements and the user role selected, you can create some forms several times.

Directory Tree

The directory tree appears next to the form on the left. It lists all forms in the emissions report and can be used for navigation. An individual form can be opened by clicking on the entry. Figure 10 shows the directory tree of an example emissions report.

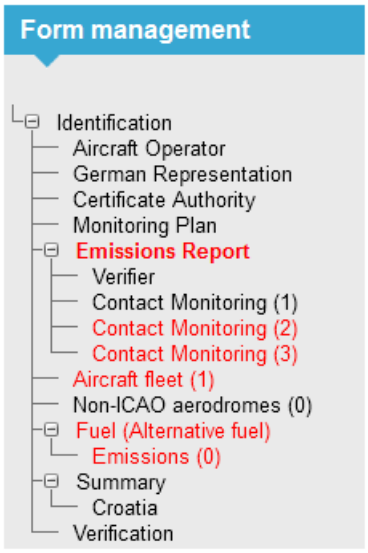


Figure 10: Directory tree

Entries highlighted in red indicate errors or missing information in this form. The open form is highlighted in bold in the directory tree. In the above example, the entry shows „Emissions report“.

Submenu

The submenu can be found above the directory tree and it offers the option to add new forms to your emissions report. The content depends on the form that is currently open and those entries you have already entered in the emissions report.

If you want to create another subform, you must open the parent form. Now the button appears in the submenu and provides the option to create additional forms. Figure 11 shows the submenu for the „Emissions report” form opened.

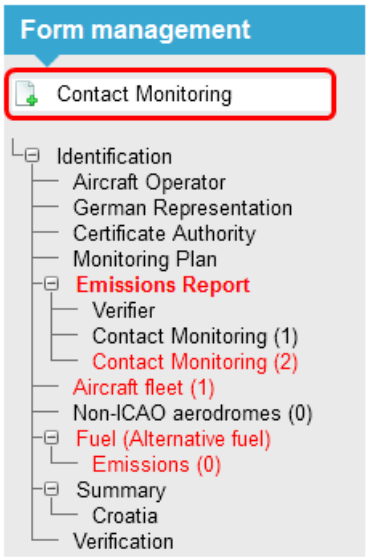


Figure 11: Submenu

The submenu can also include entries with the button, used to delete the open form provided the respective function is available for this form.

Check Window

There is a check window below the directory tree. This check window shows the missing or incorrect entries in the individual forms. The form currently open appears first in the list. The blue arrow in front of each entry can be clicked on to open the relevant form where the cursor will point to the field with the incorrect entry.
Figure 12 indicates among others that additional information is required in the “Identification“ and “Emissions report“ forms.

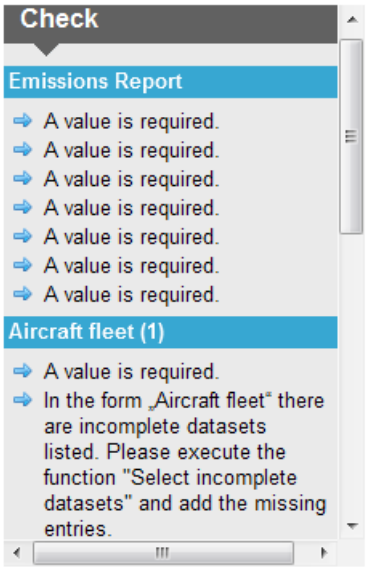

Check
Emissions Report
A value is required.
A value is required.
A value is required.
A value is required.
A value is required.
A value is required.
A value is required.
Aircraft fleet (1)
A value is required.
In the form „Aircraft fleet“ there are incomplete datasets listed. Please execute the function "Select incomplete datasets" and add the missing entries.

Figure 12: Check window

The check window is updated every time you save it manually via the Save button in the toolbar and also when forms are exchanged. The Check button offers the option of a global form update and checks the data entered.

Session Timer

Once you have logged in to the FMS, the session length is 30 minutes. The connection to the server is maintained over this time. If there is no communication with the server (e.g. saving, checking, exchanging forms, etc.) within 30 minutes, the session expires and you will need to log in again.

If the session has been automatically terminated, data entered but not saved may be lost. Therefore please save the status of your work via the Save button before leaving your workstation.

An hourglass can be seen on the right, above the clouds. This session timer shows how long the session will be valid (see figure 13). The session time is reset to 30 minutes whenever a communication with the server, such as scrolling the form, has taken place.

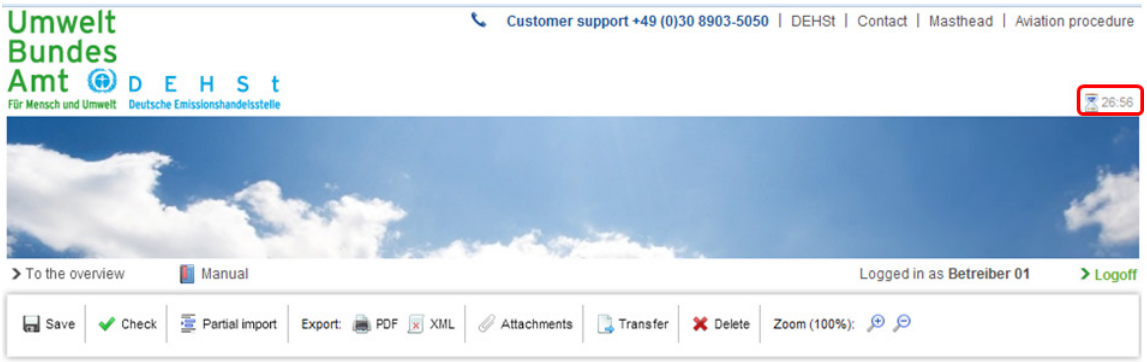


Figure 13: Session Timer

If the session has automatically timed-out, you will find a message when you return to your workstation. You will be prompted to log in again.

Note:
Please note that the session timer is based on JavaScript. If you have disabled the use of JavaScript in the web browser, the session timer is not available to you.

Toolbar

The toolbar can be found above the forms. Their buttons and associated functions are explained in Table 5-2. Depending on your user role, you are only able to use certain functions. For example, as an operator, you are not allowed to export a report as a ZIP file or delete any of the verifiers' entries.

Table 4: Buttons on the toolbar

Button	Description	Function/Notes
To the overview	Buttons on the toolbar	The currently opened record is saved and closed. Takes you to the Data Browser.
Save	Save record and perform calculations	The current record is saved. The data are calculated. The check window is updated.
Check	Verify record	The record is saved. The calculations are updated. The check window is updated.
PDF	Output record as a PDF file	A PDF file of the entire record is produced, without the attached documents.
XML	Save record locally as an XML file	The current record, including the attached documents is exported to your computer in XML format for local backup.
ZIP	Export emissions report as a zip file	A ZIP file is produced, which contains the emissions report in XML and PDF format as well as the attached documents. **Note:** This function can only be performed by verifiers!
Attachments	Attach or remove files	The operation for adding, deleting, or viewing attachments is opened. The number in brackets behind the button shows the number of attached documents.
Delete verification data	Delete verifiers' information	All entries are deleted, except those in the „verification" form. **Note:** This operation can only be performed by verifiers!
Transfer	Forward emissions report	The "Editing rights transfer" form opens. Prior to the transfer, an automatic save operation is performed and the data are calculated.
Delete	Delete emissions report	The current report, including all forms and data will be erased. **Note:** The data will be permanently deleted and cannot be restored.
	Page 1, 2 ...	The number of pages of the current form is displayed. Clicking on a page's button takes you to this page of the form.
Zoom (100%):	Zoom in/out	The form is enlarged or reduced; the options are 75 percent, 100 percent or 125 percent. The number right next to it indicates the current setting. The default setting is 100%.

5.3 Notes on Data Input

When filling out the forms for reporting, the following must be observed.

- Non-writable fields are light grey. These fields are filled in automatically by the software. They are either associated with other fields (some of them in other forms), from where the corresponding data are transferred, or they are filled by calculations, or acquired unaltered from the underlying monitoring plan.
- Writable fields can be filled by direct input or selection lists (look-ups).

Tooltips for the fields are displayed when you move the mouse cursor over the fields. The tooltip also shows whether the writable field is a mandatory field. The text will give you additional instructions and information for filling out the field. This will also help you to quickly correct erroneous entries.

Attention:
When you haven't input any data in more than 30 minutes, an error message will appear upon your next attempt to enter data. "You have been logged off by the system and must log in again". Automatic logout due to long periods of inactivity will cause the loss of all unsaved data! Therefore, always „save" before any prolonged intervals of inactivity.

5.4 Validation Checks

The built-in software validation checks will assist you in completing the emissions report. In some fields, the data is automatically checked after it has been entered. Missing or incorrect entries are highlighted in the form and the check window. For example, if text is entered into a data field, the input field is highlighted in red. In addition, a note on how to correct the error is displayed in the tooltip. Before further processing, and especially before saving the emissions report, these errors must be corrected. With every form change, the checks on the current form are re-executed and automatic error messages may be added in the check window.

By using the Check button on the toolbar, you can manually trigger a validation check across all the emissions report forms and update the messages in the check window.

5.5 Working with Interfaces

The software for generating emissions reports allows you to attach additional documents to your emissions report, to output the report as a PDF file, and to import and export emissions reports in XML format. The individual functions are described in the following subsections.

5.5.1. Attach and Read Additional Documents

Wherever you see the Attachments button in the toolbar, you can attach additional documents to the emissions report, or view them. You can attach up to 20 files to each form. The number in square brackets indicates the number of documents already attached.

If you have the editing rights, you can add other documents to the emissions report. As a user in the „verifier" role, you can only attach files to the „Verification" form and delete them from there. The other forms are only for data that operators want to add to the emissions report.

After clicking on the Attachments button, you will get to the „Attach or remove files" page (see figure 14). Here you may attach additional documents to the emissions report by clicking on the Browse... button. This opens a dialogue box for browsing your own file system. After selecting a file, it can be added by clicking on the Attach button. After that, the new document is added to the list of already attached documents.

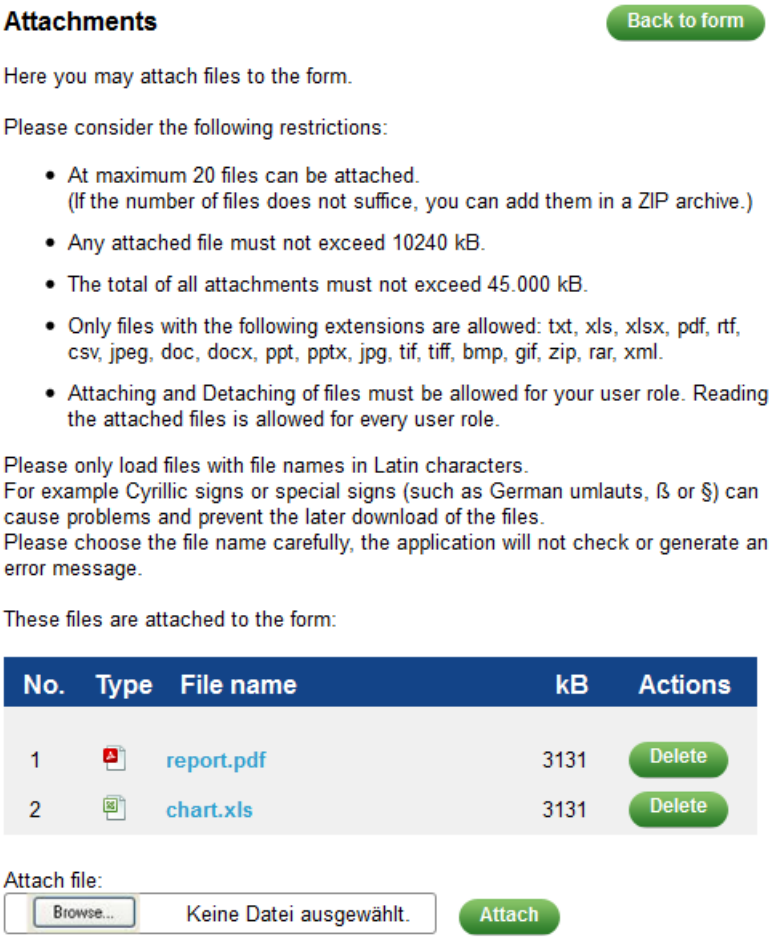

Attachments
Back to form
Here you may attach files to the form.
Please consider the following restrictions:
At maximum 20 files can be attached.
(If the number of files does not suffice, you can add them in a ZIP archive.)
Any attached file must not exceed 10240 kB.
The total of all attachments must not exceed 45.000 kB.
Only files with the following extensions are allowed: txt, xls, xlsx, pdf, rtf, csv, jpeg, doc, docx, ppt, pptx, jpg, tif, tiff, bmp, gif, zip, rar, xml.
Attaching and Detaching of files must be allowed for your user role. Reading the attached files is allowed for every user role.
Please only load files with file names in Latin characters.
For example Cyrillic signs or special signs (such as German umlauts, ß or §) can cause problems and prevent the later download of the files.
Please choose the file name carefully, the application will not check or generate an error message.
These files are attached to the form:
No.
Type
File name
kB
Actions
1
report.pdf
3131
Delete
2
chart.xls
3131
Delete
Attach file:
Browse...
Keine Datei ausgewählt.
Attach

Figure 14: Attaching files

When selecting your attachments, please note the size limit of 10,240 KB (10 MB) per file. Note also that only certain types of files are allowed. A detailed list can be found on the forms page.

To view a document, click on the file name in the list.

Attention:
The file names of the attachments cannot contain special characters (such as umlauts, ß or §), since that prevents their download ability. Please ensure that you use correct file names – the software program does not check them and will not generate any error messages.

5.5.2. Creating PDF Files

The emissions report can be output as a PDF file. Open the emissions report, and click the button in the toolbar. This will open the print function (see figure 15)

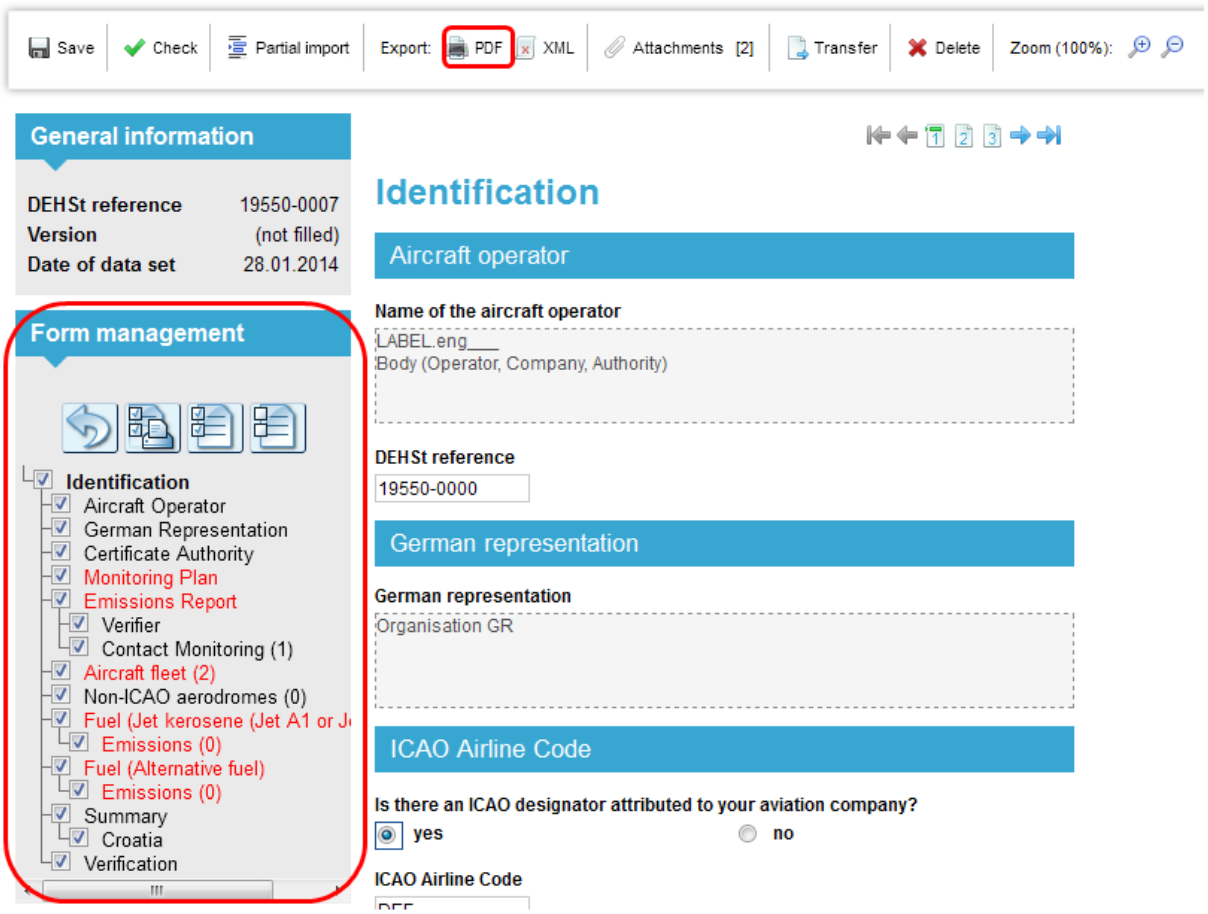


Figure 15: Print function

The print function lets you select individual forms from your records for printing.

The print features can be found on the left side in the navigation tree (see figure 16). The buttons and their associated functions are explained in Table 5-3.

Table 5: Buttons on the toolbar

Button	Description	Function/Notes
	Cancel printing	Clicking this button will close the print function and take you back to form editing.
	Start printing	Once you have made your selection, click this button to generate the PDF document.
	Select all	This button lets you select all of the forms in the record for PDF output.
	Deselect all	This button lets you deactivate your selection(s).

When you initially activate the print function using the PDF button on the toolbar, all forms are already selected for printing by default.

By clicking the check mark next to each form, you can exclude individual forms from printing. In the following example, these are the „non-ICAO airports“ forms.

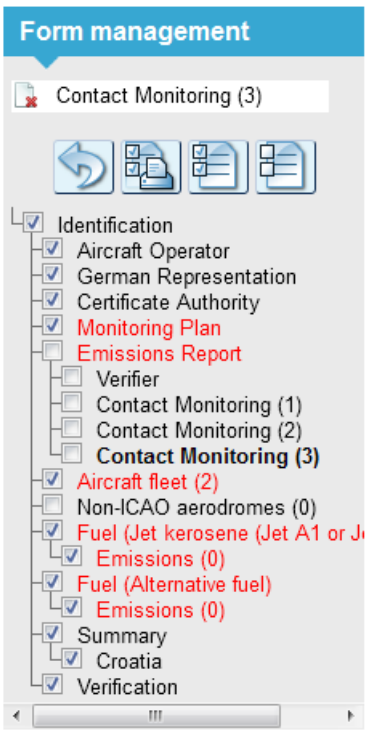


Figure 16: Example for print selection

Note:
Please note that you automatically deselect all child forms if you disable a parent form button.

Note that in Example 5-11 the check mark of the „emissions report“ form was removed that automatically excludes the child forms from printing.

To print individual forms, first deactivate all buttons. Use the „deselect“ button to do this.

Then select the form you want to print by checking the respective box. This activates only that particular form. That is the „Data gaps“ form in the following example.

Note:
Please note that you will automatically select all the child forms if you check a parent form box. This means that you activate all forms for printing if you check the „Cover page“ box.

You can save the generated PDF file locally and print it. The attached files will not be included in the PDF file.

5.5.3. Export

The emissions reporting software lets you save the form data locally as an XML file for backup and later use. To export an open emissions report, click on the XML button on the toolbar. Now the „Download the report as an XML file“ dialogue box will open above the form. Now click on **Click here to download** (see figure 17) and save the emissions report.

Figure 17: Export as an XML file

When generating export files they are saved in the following syntax „<DEHSt file reference> _Report_YE_ <Reporting year> _ <Version number>“, followed by the respective suffix for the file format (pdf, xml or zip). If

the DEHSt file reference number field is not filled out, „xxxxx“ is used as a reference number. If no version number is noted, this specification is omitted. The XML file contains all the attachments to the emissions report.

Note:
The following error message will appear if the download link is clicked a second time: „The requested file is no longer available! Please return to the form and repeat the operation!“

5.5.4. Export as a ZIP file

In the „verifier“ role it is also possible to export the report as a zip file by clicking on the ZIP button. A dialogue box will appear above the form. The file contains the report as a PDF and XML file and any attached documents. The file names of the documents attached to the forms are supplemented by a prefix and are also saved in the ZIP file. The prefix indicates to which form the file has been attached.

5.5.5. Import

Emissions reports created with this software version, for example in XML format for local data backup, can be imported. To import a file or emissions report, click on the > Import Report menu item on the start page. On the following page (see figure 18) click on Browse... button, select the storage location and filename of your XML file, and click on Choose file.

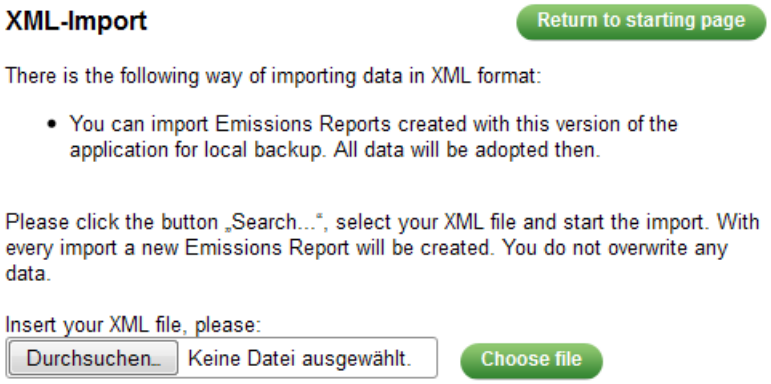

XML-Import
Return to starting page
There is the following way of importing data in XML format:
You can import Emissions Reports created with this version of the application for local backup. All data will be adopted then.
Please click the button „Search...“, select your XML file and start the import. With every import a new Emissions Report will be created. You do not overwrite any data.
Insert your XML file, please:
Durchsuchen...
Keine Datei ausgewählt.
Choose file

Figure 18: Importing an XML file

All acquired data from the XML file will be saved in a new emissions report with each import. This ensures that existing data will not be overwritten.

Note:
Please note that in this application you cannot import emissions reports from the last trading period. The same goes for monitoring plans.

Attention:
The language settings of the imported source file are adopted. The language settings of the new report cannot be changed.

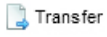
The import process makes the user the owner of the new report and automatically assigns editing rights to him.

Note:
In contrast to a detail data import, imports via the import function comprise a complete record with all information. For more information on detail data imports, see Section 6.2.2.

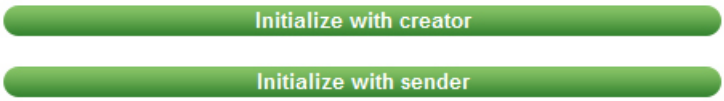
5.6 Transfer of Editing Rights

If you have created or imported an emissions report, you have the exclusive editing rights, i.e. the data can only be edited using your user ID. You can however, let another person have the editing rights to your emissions report by transferring the editing rights to him. You can, for example, have another person in your organisation edit the emissions report. The system understands which fields of the emissions report are allowed to be edited by recognising the user role selected during registration., You can check who currently owns the exclusive editing rights to the reports by looking in the „Editing rights“ column in the data browser (see figure 8).

You need to perform the following steps to transfer the editing rights.

- Click on the 

button in the toolbar.
- This opens the „Transfer editing rights” form. Please enter the emissions report recipient’s alias in this form. Please pay attention to case-sensitivity when specifying the alias. If the alias you entered in the system is unknown, you will receive an error message. Please check the spelling or consult the recipient if the alias is correct.
- Also, you can enter the alias using the default buttons. Please choose between the author of the plan or the previous editor:



- The recipient’s user data are automatically entered into the form using the „Show recipient“ button. Please check the data displayed for correctness.
- The „Show recipient“ button then turns into „Transfer editing rights“. Please confirm the transfer by clicking the button.
- On clicking the „Transfer editing rights“ button, an email window will open in which the recipient has already been entered by the system. Essential data of the facility are automatically entered in the email to facilitate assignment to the recipient. You can use this email to notify the recipient.

Transferring the editing rights to the responsible verifier enables him to edit the relevant fields.

If you created the reports and have transferred the editing rights, you will still find those reports in your data browser, but you will only have read-only access and cannot edit the data. However, if you have transferred the editing rights to an emissions report that you did not create, you can no longer see this emissions report in your data browser.

6 Creating and Completing Emissions Reports

After successful registration and login, the report can be created, completed and forwarded to the verifier in the next step. The steps necessary for the successful completion of the forms are described in this Section.

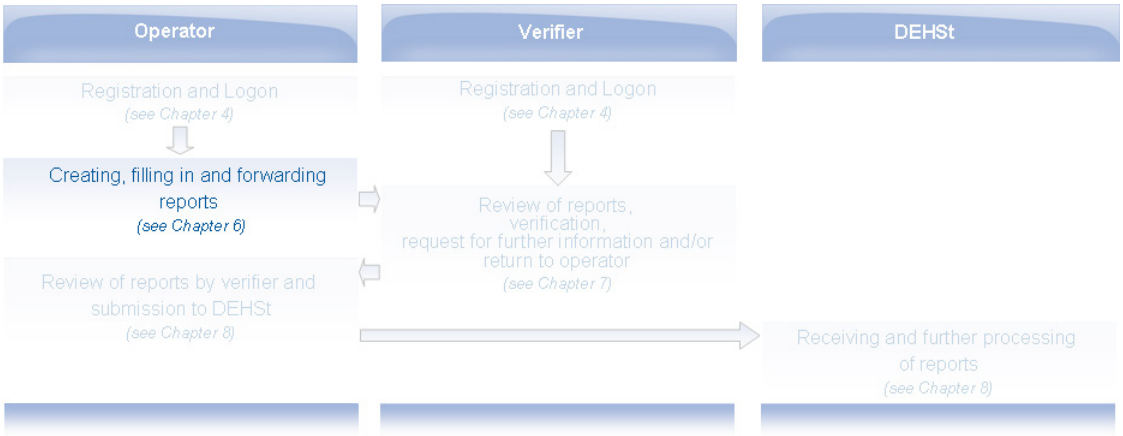

Operator
Verifier
DEHSt
Registration and Logon
(see Chapter 4)
Registration and Logon
(see Chapter 4)
Creating, filling in and forwarding reports
(see Chapter 6)
Review of reports, verification, request for further information and/or return to operator
(see Chapter 7)
Review of reports by verifier and submission to DEHSt
(see Chapter 8)
Receiving and further processing of reports
(see Chapter 8)

Figure 19: Reporting flow

6.1 Creating a Report from the Monitoring Plan

As a software user in the role of „operator“ you can use the “creating new reports” function for various reporting years. A new report for the CO_2 emissions (emissions report) can only be created based on a current monitoring plan.

You can create a new emissions report using the › Create Report menu item. You can then select the relevant reporting year (see figure 20).

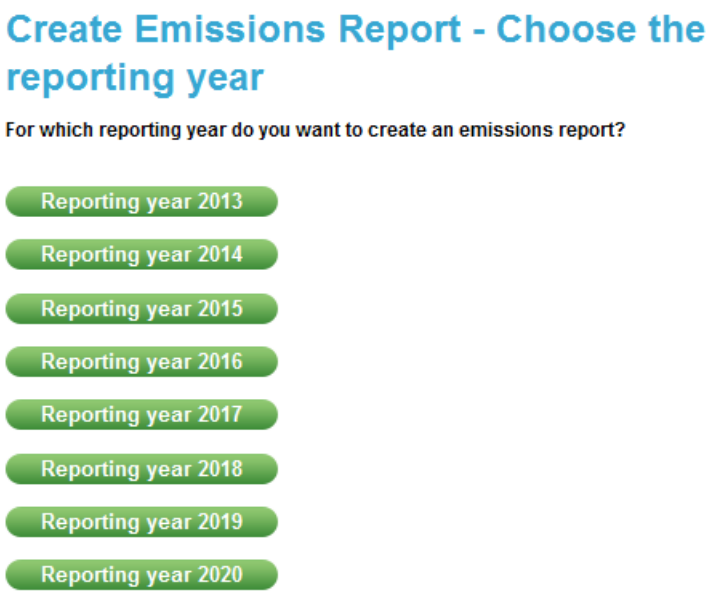

Create Emissions Report - Choose the reporting year
For which reporting year do you want to create an emissions report?
Reporting year 2013
Reporting year 2014
Reporting year 2015
Reporting year 2016
Reporting year 2017
Reporting year 2018
Reporting year 2019
Reporting year 2020

Figure 20: Selecting the reporting year

Having selected the correct year, a data browser opens in which all accessible monitoring plans are displayed (see figure 20). Please select the monitoring plan suitable for your emissions report.

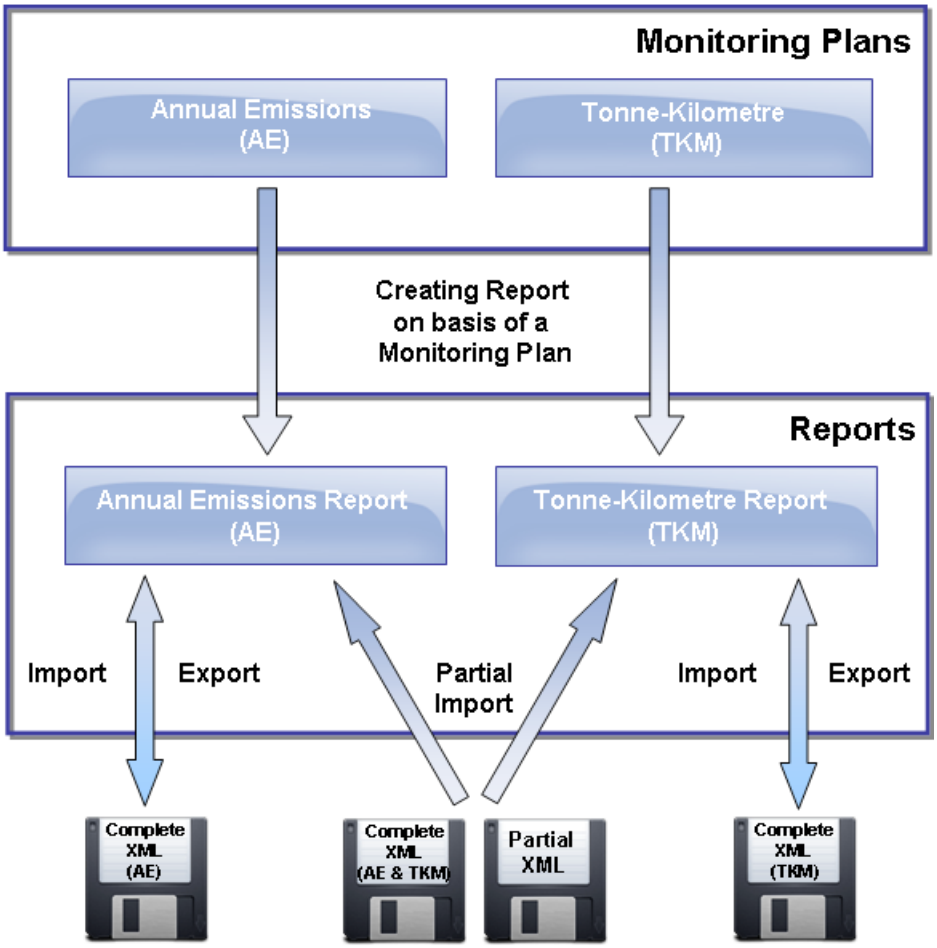


Figure 21: Overview of import and export opportunities

The function of creating reports for different reporting years will direct you to the data browser (see figure 21), where the selectable monitoring plans from among the “Annual Emissions Monitoring Plan” applications are displayed. You can only select from those monitoring plans that you have created using the monitoring plans application under the same user ID with which you have logged into the report application. If you do not currently own the editing rights to a plan, you cannot select it. The data browser will display the owner of the editing rights (see figure 22).

Note:
If a monitoring plan is not displayed in the data browser, you are either registered with a different user ID or you have deleted the required plan. If you have exported and saved the required plan locally, you can login to the application for monitoring plans and import the relevant XML file from there.

The data browser entries include basic information about the plan. You also can check whether the respective monitoring plan is „suitable“ or „unsuitable“ for the creation of a new report by checking the attributes displayed in the last „Status“ column. Plans marked „unsuitable“ do not contain all the necessary information and thus cannot be used. Plans marked „suitable“ contain all the necessary mandatory data and can be used for creating a new report.

Please select a plan by clicking on the relevant entry in the table. A form page will open and show more information about the selected plan.

The > To the overview button takes you back to the data browser where you can select a different plan. A report is created by clicking on the > Create Report button. You are then directed to the first report form „Identification“ and can start entering your data. For more information on completing new reports, see Section 6.2.

If the „Create report“ button is missing in the information form, you have chosen a monitoring plan labelled as „unsuitable“. Please go back to the data browser using the > To the overview button.

A report consists of various forms, sometimes with several pages that are automatically generated. With the exception of some address forms, all forms have already been created and initialised with default data from the monitoring plan.

Note:
A „Fuel“ form with a subform is generated in the emissions report for each „Fuel type“ form from the „Annual emissions“ monitoring plan. Other fuel forms cannot be added to the report.

Note:
The language setting is adopted from the monitoring plan when creating a new report but cannot subsequently be changed.

We recommend editing the report forms from top to bottom, according to their arrangement in the directory tree.

6.2 Completing a Report

Having created a new emissions report (Section 6.1) or called up an existing emissions report using the > Select Report menu item (see Section 5.1.2), you are directed to the Identification form. Validation checks and tooltips built into the software relating to the individual fields provide support for editing the emissions report. You can read about the functions of the fields highlighted in different colours in Section 6.3.

Default forms are already created with a new emissions report (see Section 6.1). You must create all other required forms. A new form is always allocated to a different form. The way the forms are allocated has been specified in advance. New forms can only be created if you have created and opened the corresponding parent form.

Entered data are automatically saved with every change in the form. It is recommended however, to regularly save newly entered data manually, especially with prolonged editing of a form page, using the Save button in the toolbar. Before leaving the emissions report, you should also perform a manual save.

Note:
Please note that some forms have more than one page. You will find an appropriate note at the bottom of the page of the relevant forms. You can use the page navigation above and below the form area.

6.2.1. Tabular Display in Forms

In some forms, the input fields are displayed in tabular fashion for clear and space-saving display and data entry. Tabular display is applied in

- „Aircraft fleet“
- „Non-ICAO airports“
- „Emissions“ in the emissions report forms

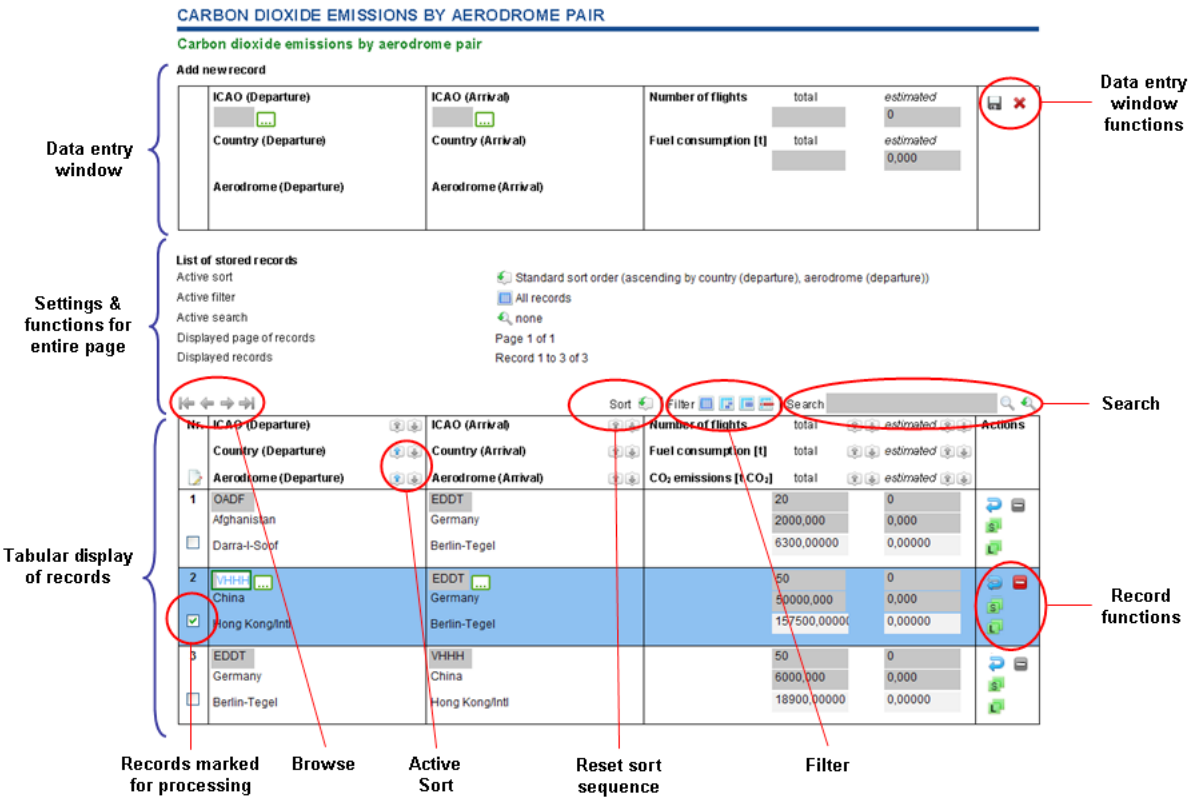


Figure 22: Tabular displayng

The form page consists of the following fields (top to bottom):

- Input template,
- Display of the current settings and functions for the entire page and
- Tabular display of data sets already collected.

To collect new data sets using the input template, see the „Collect data sets“ section.

The current display settings show which sort, filter or search has currently been selected. In addition, the display shows which data fields the sort or search will process.

Furthermore, you can see the page currently displayed, the total number of pages, the number of data sets currently displayed on the page and the total number of data sets collected. In addition, this area contains a number of functions for the entire form. All available functions are described in Table 6-2.

The tabular display can spread over several pages. Ten data sets per page are displayed. Please use the buttons to navigate through the pages. The buttons are shown in blue when the function is active.

If nothing is selected in the form, the data sets are displayed after a default sort. The buttons enable you to sort the columns according to the listed entries in ascending or descending order. The current sort is highlighted, changed in the display area and can be reset to the default sort using the button.

When using the search function, you can search targeted data sets by typing in a search term (airport, land or ICAO code). The search can be reset using the button.

Note:
When searching in the tabular display, all entries are checked for the search character string. The use of search operators (wildcards) such as *, % or similar is not necessary and distorts the result. Upper and lower case are also irrelevant when entering a search term.

Specified filter functions also enable the search results to be narrowed. Table 6-1 shows which filter functions in which forms are available and explains them.

Note:
Search function and filters can be combined. The search then can be refined and the results narrowed even better than when using only one of the two functions.

Table 6: Filter functions in tabular display

Filter \ Form	Aircraft fleet	Non-ICAO airports	Transport performance or emissions
„Display all“	All data sets are fully visible.	All data sets are fully visible.	All data sets are fully visible.
„Filter incomplete entries“	All data sets in which the mandatory field data are not completed fully are displayed.	All data sets in which the mandatory field data are not completed fully are displayed.	All data sets in which the mandatory field data are not completed fully are displayed.
„Filter duplicate entries“	All data sets that include aircraft with identical ID (same values in the „ID“ field) are displayed.	All data sets in which the airport information and State is the same are displayed (the airport is duplicated).	All data sets in which the ICAO code for the departure and the landing site is the same are displayed (the specific airport pair is duplicated).
„Display non-ETS flights“			All data sets that contain airport pairs with departure and landing sites outside the European Economic Area (EEA) are displayed. **Note:** The corresponding flights are not subject to the compulsory reporting and emissions trading scheme.

Note:
When executing the selected filter function, an edited data set is saved automatically and is then no longer in the edit mode.

Table 7: Functions for the entire tabular form

Button	Button description	Function/Notes
	Next page or previous page	Enables navigation through the data sets, the next ten or previous ten data sets are displayed. A data set where editing has possibly started is saved automatically and is no longer in edit mode.
	Last page or first page	Enables navigation forward to the last page or back to the first page. A data set where editing has possibly started is saved automatically and is no longer in edit mode.
	Search	The entered search text with this exact spelling is searched in columns two and three of the tabular display (airfield, country, ICAO code). Upper and lower case is ignored. A data set where editing has possibly started is saved automatically and is no longer in edit mode.
	Reset search	The current search is deleted and all data sets are fully visible. A data set where editing has possibly started is saved automatically and is no longer in edit mode.

All of these symbols and functions are marked in figure 22.

Capturing a data set

To enter new data sets, you can use the text boxes at the top of the form. After you have completed all fields, you can create the data set by clicking the „Save data set“ button. It is immediately inserted into the table structure using to the current settings, the input template is cleared and can be used again. The total number of captured rows (= data sets) is displayed in the directory tree of the respective form (see also Section 5.2.3).

Use the ✕ button to discard the data in the input template.

To capture additional data sets based on previously established / created data sets the reporting software provides several options. Depending on which form is open, you can create data sets using the following buttons

- create return flight,
- copy the departure site,
- copy the landing site and
- copy aircraft

Create data sets

When one of these functions has been selected, the system opens an input template. Depending on the function selected, certain fields in the input template are populated with data from the respective data set.

Note:
If you have already completed several data set pages, it may happen that the newly entered data set is inserted on a page that is not currently visible, making it invisible to you the moment it is saved.

Table 8: Functions for capturing data sets

Button	Button description	Function/Notes
Functions for capturing a data set in the input template		
	Save data set	The data set is saved and inserted into the table structure.
	Discard data set	The form is cleared. The data that was entered are not saved.
Functions for capturing a data set from existing data sets		
	Create a return flight	A new data set appears in the input template for input. The fields for departure and landing are prepopulated with the respective inverted values.
	Copy departure site	A new data set appears in the input template for input. It contains the same departure site as the row in which the function was executed.
	Copy landing site	A new data set appears in the input template for input. It contains the same landing site as the row in which the function was executed.
	Copy aircraft	A new data set appears in the input template for input. It contains the same aircraft (manufacturer, model) as the row in which the function was executed.

As an alternative to inputting new data sets, you can import parts of a locally saved data set as described in Section 6.2.2.

Editing a data set

To edit an already existing data set, select the check box at the beginning of a row. The row selected for editing is highlighted in blue. In the last column of the row you see all of the actions available for the selected data set. Only one row at a time can be edited. Once you have finished editing a data set, click on the check box again. Now you can select another row for editing.

Table 9: Functions for editing a single data set

Button	Button description	Function/Notes
	Delete data set	The row for which the function was executed is deleted. **Attention:** This function is available only after selecting a data set for editing. Once deleted data sets cannot be recovered.

After editing a data set, the data are automatically validated, calculated and saved.

Please note the different behavior of tabular representations in the display of error messages in the check window. Information can be found in Section 5.2.3.

6.2.2. Adding Data Detail Using Partial Imports

A partial import is a supplementary import of detailed data into an existing report. A detailed data import does not add or delete forms, but adds form contents (in this case data sets in table forms). Only the „Aircraft fleet“, „Non-ICAO airports““ and „Emissions“ forms are affected by the partial import (see also figure 9 and 10). This function is only available to users in the „operator“ role.

Possible sources for the detail data import can be

- the entire export file (XML file) that was created using the application for electronic reporting of CO_2 emissions (emissions report). Only reports from the same reporting year can be imported.
- a valid XML file that was created with an external application according to the published XSD schema.

This results in different combinations of source file and target report. These are listed in the following figure. The important steps are documented in the individual cells of the table for each detail data import.

Table 10: Combination options for detail data import

Source \ Target	Emissions report	Tonne-kilometre report
Emissions report	Existing data sets in the „Air fleet“, „Non-ICAO airfields“ and „Emissions“ forms are deleted. Then the data sets from the XML file are imported. Only data sets in which the fuels are also present in the target report are imported into the „Emissions“ form. Only reports from the same reporting year can be imported.	Existing data sets in the „Air fleet“, „Non-ICAO airfields“ and „Transportation services“ forms are deleted. Then the new data sets from the XML file are imported. The data from the „Emissions“ forms are imported into the „Transportation services“ form. It may then be necessary to manually sum up the number of flights from duplicate entries of airport pairs, and to delete those that are obsolete. Only reports from the same reporting year can be imported.
External	Existing data sets in the „Air fleet“, „Non-ICAO airfields“ and „Emissions“ forms are deleted. Subsequently, the data sets are imported from the XML file. Only data sets in which the fuels are also present in the target report are imported into the „Emissions“ form.	Existing data sets in the „Air fleet“, „Non-ICAO airfields“ and „Transportation services“ forms are deleted. Then the data sets from the XML file are imported.

Note:
The detailed data import can be performed only if the language settings of the import file match the language settings of the report.

To perform a detailed data import, click on the Accept detailed data from XML file button. On the „Partial data import“ (see figure 23) page that now opens click on Browse..., select the storage location and file name of your XML file and then start the partial import by pressing Choose file.

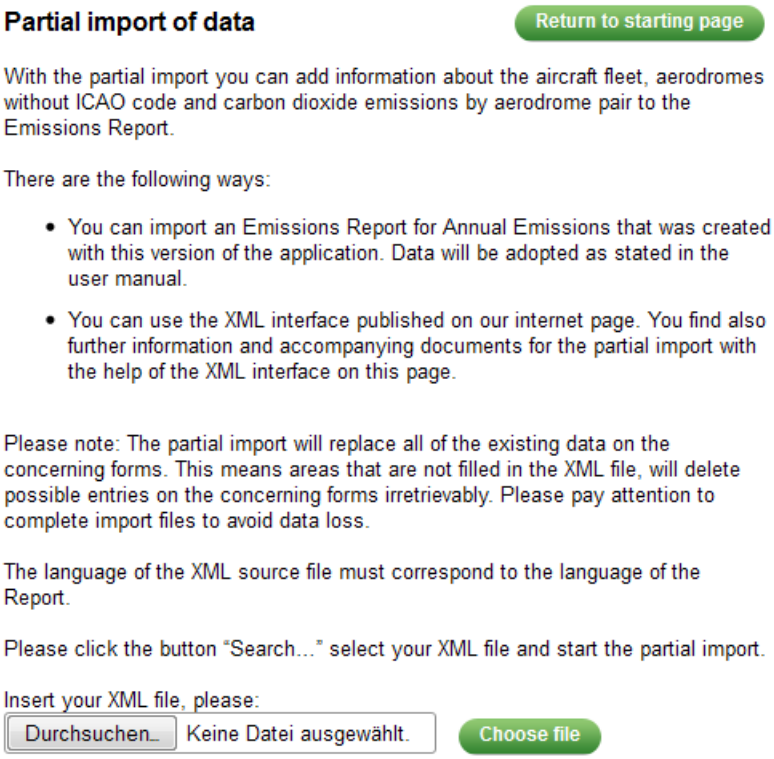

Partial import of data
Return to starting page
With the partial import you can add information about the aircraft fleet, aerodromes without ICAO code and carbon dioxide emissions by aerodrome pair to the Emissions Report.
There are the following ways:
You can import an Emissions Report for Annual Emissions that was created with this version of the application. Data will be adopted as stated in the user manual.
You can use the XML interface published on our internet page. You find also further information and accompanying documents for the partial import with the help of the XML interface on this page.
Please note: The partial import will replace all of the existing data on the concerning forms. This means areas that are not filled in the XML file, will delete possible entries on the concerning forms irretrievably. Please pay attention to complete import files to avoid data loss.
The language of the XML source file must correspond to the language of the Report.
Please click the button "Search..." select your XML file and start the partial import.
Insert your XML file, please:
Durchsuchen...
Keine Datei ausgewählt.
Choose file

Figure 23: Partial import of data

On the next page you will be asked if you want to continue the partial import. Clicking on Yes will continue the partial import, the existing data will be erased and the new data is imported. The report opens anew and you will see the first form. In the directory tree, you can see the change in the number of data sets next to the form name.

If you press No, you will cancel the partial import and return to the initial form.

Attention:
The partial import replaces all existing data on the „Air fleet“, „Non-ICAO airfields“ and „Emissions“ forms. Incomplete areas in the XML source file cause entries in the corresponding forms to be erased.

If the partial import fails, you will receive an error message. You can either return to the import and try again or return to the report.

6.3 Transferring Reports

When you have finished your report, you should check your information again for completeness and accuracy. Only when there are no more messages in the check window, will you have corrected all data entry errors and completed all forms according to their specifications. A description of the steps necessary to transfer editing rights to your verifier can be found in Section 5.6. Once you have addressed your verifier using their alias, you can transfer editing rights and initiate the report validation.

If you are the author of the report, it will remain visible in your data browser even after you have transferred the exclusive editing rights.

Take advantage of the automatically generated email or other media to inform your verifier that you have transferred the report.

7 Examination by the Verifier

Following completion of the reports by the operator, the verifier will examine the data submitted. This section is intended to support verifiers in processing reports. For operators, this section serves to better understand the verifier‘s process and their responses.

As verifiers you will perform a detailed examination of the reports submitted by operators. You document the results in the reporting software and optionally in a separate report. After completing your examination you will send the verified report to the operator (see figure 24).

Operator
Verifier
DEHSt
Registration and Logon
(see Chapter 4)
Registration and Logon
(see Chapter 4)
Creating, filling in and forwarding reports
(see Chapter 6)
Review of reports, verification, request for further information and/or return to operator
(see Chapter 7)
Review of reports by verifier and submission to DEHSt
(see Chapter 8)
Receiving and further processing of reports
(see Chapter 8)

Figure 24: Reporting flow

7.1 Report Examination

Before initially using the application you must create a user ID. This is described in detail in chapter 4. Be sure to select the „verifier“ user role. You can log in after creating a new user ID. In order for the operator to be able to transfer editing rights to you, you need to provide him with your alias. After that you can work on your assigned reports.

The following sequence is useful for the examining the reports:

7.1.1. Data Transfer from the Operator via Editing Rights Transfer

As a verifier, you are not authorised to create reports. This is a task for the operator. He can transfer the editing rights for a report to you. You view the forwarded report in your data browser. The operator may also inform you via email or by other means that he has transferred the editing rights to you so you can examine the report.

7.1.2. Examination of the Operator‘s Information and Attachments

After logging in to the system you can use the › Select Report menu item in the left menu bar on the start page to call up an overview of all data sets. The reports for which you have editing rights are marked with your alias in the „Editing rights“ column. By clicking on a data set, the corresponding report is opened. In order to verify the report, call up the individual forms and check the information that was entered by the operator. Note that some forms contain several pages. For accessing other pages, use the buttons in the toolbar.

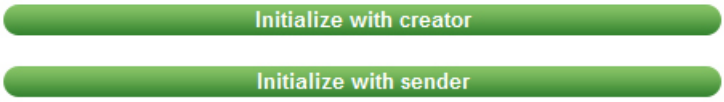
In the directory tree on the left side of the screen, the form which is currently open will be in bold type. Forms that are still missing your information are marked in red. The report fields provided for you as a verifier are labelled with blue italic lettering (see also Section 5.3).

Review the information provided by the operator, and document the examination in the forms. In addition to simple selection boxes, you will also see text boxes. You can see the maximum number of characters in the corresponding tooltip. If you copy more text into these fields than the maximum number of characters allowed, it will be truncated when saved. In cases like that, you should attach a separate document with this text to the report (see Section 5.5.1).

To examine the documents the operator attached to the report, click on the Attachments [2] button in the toolbar. If there is no number in square brackets displayed next to the paperclip symbol, no documents were attached to the form. Now, the „Attach or remove files“ overview will open where you can open the documents by clicking on the file name. You can download and view the documents attached by the operator. However, it is not possible to delete them from the report.

7.1.3. Request Additional or Missing Information

If, as a verifier, you cannot conclude the examination of the report because of missing or implausible data, you can inform the operator that additional information or corrections are necessary. Transfer the report‘s editing rights back to the operator. A description of the steps necessary to transfer editing rights to the operator is available in Section 5.6. You may have to obtain the operator‘s alias. However, the „Transfer editing rights“ form also provides the following two buttons.



After pressing the buttons, the recipient is automatically entered. Please check this information for accuracy. Following the transfer of editing rights an email will be generated automatically – use it to clearly state your requests to the operator.

After the operator has corrected the report, he will transfer editing rights back to you. You can then view the new information and consider whether this results in changes to your review. Using the Delete verification data button in the toolbar, you can delete all your previous report examination entries with the exception of the „Verification“ form. After clicking the button, a security check follows. If the button for deleting verifier fields appears grey, you do not currently have editing rights for this report.

7.1.4. Preparation of the Verified Report

In the „Verification“ form you conclude your description of the verification process. Note that this form contains five pages. After examining the operator’s data (including attached documents) and after completing the verifier fields, the final report is generated and forwarded to the operator. The following procedure must be adhered to:

- Use the ZIP button in the toolbar of the open report.
- Save the file locally on your computer. The ZIP file that is generated contains the report in XML and PDF formats. The documents attached to the report are also included in the ZIP file (also see Section 5.5.3).
- Finally you have to send the zip file to the operator via the VPS with a qualified signature.

After sending the ZIP file, you should transfer the editing rights to the report back to the operator (see also Section 5.6). This will remove the report from your data browser. If you imported the report yourself and are therefore the author of the report, you can delete it after final editing by clicking on the ✕ button in the toolbar.

7.2 Requests for Corrections and Additions

A result of the examination of the report could be further requests for correction or supplemental information to the operator. The verifier will notify the operator as soon as possible to make the necessary adjustments. As an operator, you should claim back the exclusive editing rights to your report from the verifier. If you do not currently have this right, you can view your report, but not edit it. After having retrieved the editing rights, you need only change the necessary information selectively and not create a new report.

Once you have completed all corrections and additions, transfer the editing rights back to your verifier (see Section 5.6).

7.3 Verifizierter Bericht

After final verification of the submitted report by the verifier, you will receive a signed report on the VPS. In the zip file you received, you will find

- the verified report in XML and PDF format, and
- all attached documents.

8 Submission to DEHSt

Your last task as an operator is to check the feedback from the verifiers and submit the documents to the German Emissions Trading Authority (DEHSt) at the Federal Environment Agency.

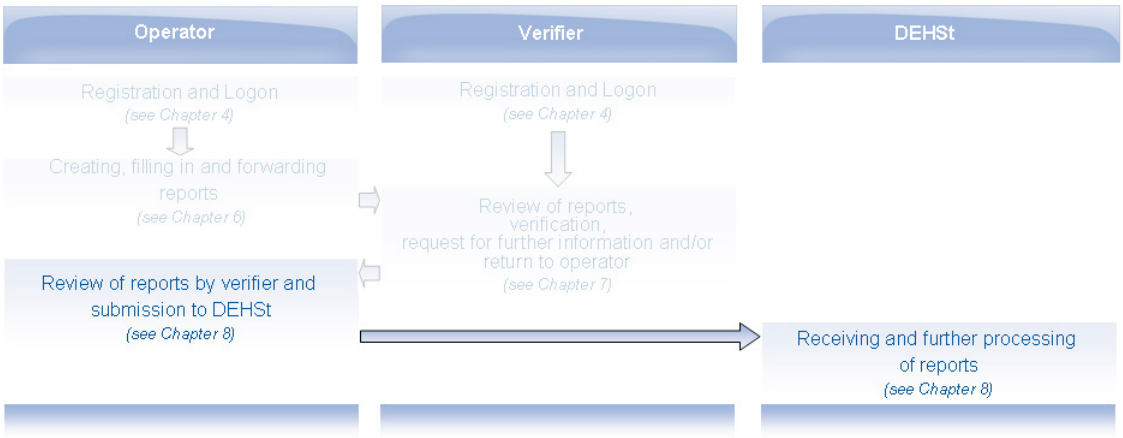

Operator
Verifier
DEHSt
Registration and Logon
(see Chapter 4)
Registration and Logon
(see Chapter 4)
Creating, filling in and forwarding reports
(see Chapter 6)
Review of reports, verification, request for further information and/or return to operator
(see Chapter 7)
Review of reports by verifier and submission to DEHSt
(see Chapter 8)
Receiving and further processing of reports
(see Chapter 8)

Figure 25: Reporting flow

You should re-check the report sent to you by the verifier for completeness and accuracy by comparing it with the PDF file.

If all data are correct, please send the ZIP file created by the verifiers to DEHSt using the VPS. The conditions of use for the VPS can be found on the „electronic communication“ pages of the DEHSt website.

After the verifier has verified the report, you will receive the verifier’s report via the Virtual Post Office (VPS) attached to a signed, qualified message. You need to forward this same original message directly to the DEHSt, otherwise the verifier’s signature will be lost.

9 Troubleshooting

This chapter briefly describes potential problems when using the reporting software and their remedies. Common difficulties and appropriate solutions are grouped as: general, operators and verifiers.

9.1 General Assistance

9.1.1. Starting the Software

The application cannot be opened.	▸ Please check whether a continuous Internet connection is available. ▸ Please check whether your web browser and its settings are suitable for the software application (see Section 2.22.2).

9.1.2. Registration and Login

A user account cannot be created.	▸ The user ID already exists. In this case, the „User ID“ field is highlighted in red. Please choose a new user ID. ▸ The second confirmed password was entered incorrectly. Please retype the entry. ▸ The alias already exists. In this case, the „Alias“ field is highlighted in red. Please choose a new alias.
A user account cannot be deleted.	▸ Please make sure that no data sets are present in your data browser as a user account can only be deleted when the data browser is empty. Please note that your user account is valid for multiple applications in the software and data sets must not be present in any of these other applications.
Login failed.	▸ Please make sure you use the proper user ID and password. ▸ After prolonged inactivity on the login page you need to refresh the page by clicking the „Refresh“ button in your web browser and log in again. ▸ If you have made three faulty login attempts, your account will be blocked and you must contact the DEHSt Customer Service to unlock it.

9.1.3. Data Browser

Not all reports are displayed in the data browser.	▸ Please check whether the data browser has multiple pages. Only 15 reports are displayed per page. ▸ Data sets that have not been created or imported by you and for which you do not have the editing rights, do not appear in your data browser. ▸ Please refresh the data browser using the Refresh view button.

9.1.4. Creating a Report

A report cannot be created.	▸ A report can only be created based on a monitoring plan. The monitoring plan can only be used if it contains certain data. ▸ Please check the monitoring plan for completeness in the monitoring plan software. ▸ Please check that you have the editing rights for the monitoring plan and that they are assigned to you to be able to use the plan.
The current monitoring plan does not appear in the selection list.	▸ Please check under which user account you are logged in. Only those monitoring plans that are saved in the monitoring plan software under the same user account are displayed. ▸ If applicable, please login to the monitoring plan software and import your XML file. Now you can also see the plan in the reporting software.

9.1.5. Displaying Tooltips

„Tooltips“ are not displayed.	▸ Please check if Java Script is enabled on your computer (see Section 1.1.1).

9.1.6. Completing Relevant Fields

Some fields cannot be completed.	▸ There are fields for both the operator and the verifier in the forms. You can only complete the fields corresponding to your role. ▸ You can usually complete the dark grey fields. Light grey fields are usually automatically completed. ▸ If an input is still not possible, please check that you have the editing rights to the report in the data browser.
A selection list only displays a single entry.	▸ The search is filtered: only entries that contain the characters in the search field are displayed. You can disable the search filter by deleting the search field entry and pressing the return key.
The "Search" function is not available in the selection list.	▸ The „Search“ button will become visible when you resize the window.

9.1.7. Editing Data in the Tables

A new data set cannot be saved. An error message appears.	▸ Please check the data set for completeness: it can only be saved and included into the table when it is complete.
Not all data sets in the table are visible.	▸ 10 data sets per page are displayed. Other data sets can be accessed by browsing using the buttons. ▸ Please check if filters have been set and only the filtered results are displayed. The filters selected are listed above the table. Please press „Show all“ to reset all filters.
A data set cannot be edited.	▸ Please check if you have ticked the check box of the data set to be edited and thus enabled it for editing.
A data set cannot be copied.	▸ Please check if you have ticked the check box of the data set to be edited and thus enabled it for editing.
A data set cannot be deleted.	▸ Please check if you have ticked the check box of the data set to be edited and thus enabled it for editing.

9.1.8. Deleting a Report

A report has been inadvertently deleted.	▸ A deleted report cannot be recovered from the system. If you had previously exported the report as an XML file, you can import it again.

9.1.9. Converting into a PDF file

A PDF file is not displayed.	▸ Please check if the web browser’s pop-up blocker is disabled. The PDF file can only then be opened. ▸ Please check if Acrobat Reader is installed on your computer. ▸ Please check if more than one Acrobat Reader version is installed on your computer. There must be only one version installed.
A PDF file does not open automatically, but can be saved.	▸ Please check your web browser setting „Do not save encrypted pages on the hard drive“. Remove the tick. It is advisable to tick the box again after you finish working in the FMS software.
A PDF file contains duplicate form pages.	▸ Using manual line breaks in text fields can cause page breaks to occur in the PDF file. ▸ Remedy: Please delete the relevant line breaks in the form and re-create the PDF file. ▸ The duplication of form pages is a mere cosmetic issue and has no effect on editing the data in a message.

9.1.10. Transferring the Editing Rights

The editing rights cannot be transferred.	▸ Please check whether the recipient’s alias is correct. ▸ Please check if you currently have the editing rights. Only if you hold the editing rights can you transfer them.

The editing rights lie with another user and you would like to have them back.	▸ Please let the user know and share your alias with him. The user can then return the editing rights to you.

9.1.11. Saving a Report

The following error message appears: "The operation could not be performed due to an internal error. Please check that all required entries are available and correct."	▸ At least one input field contains more than the allowed number of characters. Please check fields highlighted in red for the allowed number of characters. ▸ Manual line breaks reduce the allowed number of characters. A manual line break occupies two characters. ▸ A value entered does not match the value range of the selection list.
The following error message appears: "Your input could not be saved because the specified data format or value range has not been observed in at least one numeric field. Please return to the form and correct all numeric fields that are highlighted in red. You can then save the form. "	▸ Please check fields highlighted in red for the allowed number of characters. Typically, numerical values in numeric fields are too big.

9.2 Assistance with the Operator's Potential Problems

9.2.1. Import of Data

Importing an XML file failed.	▸ Please check that the file is an XML file. Only XML files can be imported. ▸ Please check the file path and file name.
Checksum provides an erroneous result.	▸ A checksum error during import indicates that the XML file was changed after being exported from the FMS. A warning message appears in this case, but the import is fully completed. Please tell the file's sender about the subsequent change.
The XML file chosen by you does not match the interface definition.	▸ The reporting software only supports the import of XML files whose format corresponds to the report's specifications. You may have tried to import a file that does not support the current structures. Please check your choice!

9.2.2. Importing Detailed Data from an XML File

Importing an XML file failed.	▸ Please check if the file is an XML file. Only XML files can be imported.
	▸ Please check the file path and file name.
	▸ Only XML files can be used
	  ▸ that conform to the requirements of the published XML schema,
	  ▸ that have been created using the reporting software for carbon dioxide emissions and tonne-kilometre data.
	▸ Only reports from the same reporting year can be imported.

The XML file chosen by you does not match the interface definition.	▸ The reporting software only supports the import of XML files whose format corresponds to the report's specifications. You may have tried to import a file that does not conform to the current structure. Please check your choice!

9.2.3. Forms

A form cannot be created.	▸ You can only create a form when the parent form is open.
A form cannot be deleted.	▸ Please check if the form is open. The form can be deleted if the menu item „Delete" appears in the submenu of the directory tree.

9.2.4. Checking the Report

Entries keep appearing in the check window.	▸ Please check if all mandatory fields have been completed and the values entered do not contain an error. Please also note that some forms contain several pages on which information must also be entered.

9.2.5. Calculation of CO_2 Emissions

The emissions calculated by the software are different from your own calculation.	▸ The entries are rounded to a specified number of decimal places within the reporting software. The result is rounded to three decimal places. Therefore, differences in the result may occur. ▸ Please re-check the calculation using the values rounded by the reporting software. If the result still differs, please contact the DEHSt.
The summary emissions do not match.	▸ Please check the data in the forms already created.

9.2.6. Attaching Documents

A document cannot be attached.	▸ Not all forms allow files to be attached. The button shows that files can be attached. ▸ Please check whether the file to be attached satisfies the file formats allowed. ▸ Please check that the file size allowed is not exceeded. ▸ Please check that the maximum number of documents is not exceeded.
The attached document appears with an extended file name.	▸ If you attach two documents with the same name, the software automatically assigns and adds a sequential number to the file name as an extension.
An attached document cannot be opened.	▸ If the file name contains special characters or umlauts, the document cannot be opened. Ask the operator or verifier, to attach the document again with a modified file name.

9.3 Assistance with the Verifier's Potential Problems

9.3.1. Deleting the Verifier Fields

Verifier fields cannot be deleted.	▸ Check whether you have the editing rights to the report and can act in the role of „verifier“. Only with the editing rights can you delete the entries in the verifier fields.

Glossary

Account	See *User account*
Aircraft fleet	Includes all aircraft of an aircraft operator
Alias	The alias is a name defined by you that occurs only once in the application. Upper and lower case letters are recognised here. As an aircraft operator or verifier you provide the alias to your respective role counterpart in order to enable him to transfer the *editing rights* to a *report*. The *data browser* displays the alias in the „Editing rights“ and „Creator“ column.
Authentication	Checks your login credentials *user ID* and password
Author	The user that creates or imports a *report* for the first time.
Barrier-free modus	Accessibility, i.e. unrestricted use of the software by disabled people is possible. Examples: in graphical applications, interfaces are provided for braille presentation or screen readers, buttons/fields have a textual description etc.
Biomass	Fuel with an emission factor of 0.
Data browser	Table view of a user's reports that contains information about the *reports* (operator, DEHSt file number, ICAO name, version, owner of the editing rights, author, language).
Data set	Data of a *report* that have been collected with the software
DEHSt	German Emissions Trading Authority at the Federal Environment Agency
Editing rights, exclusive	The possession of these rights is a prerequisite for editing a à report. The editing rights to a report can only be owned by one single user (exclusive editing rights). The current owner of the editing rights is displayed in the *data browser*.
EEA States	Countries of the European Economic Area
Emissions report	See *report*
Export, XML	A *report* can be exported as an *XML file* at any time to locally save the data.
FMS	Form Management System
Form	Input template; data are entered in different forms within a *report*.
Fuel	Standard fuels, alternative fuels and *biomass* are differentiated. A fuel may also consist of a mixture of various standard fuels.
Guide	Guidance document for creating CO_2 emissions reports and allocation applications including reports on transport performance (tonne-kilometre data).
ICAO	International Civil Aviation Organisation
ICAO code	Used to unambiguously identify airports and heliports as well as aircraft types and aircraft operators; issued by the *International Civil Aviation Organisation*
Import, XML	Import enables re-reading *backups* that have been created by *exporting* in the *XML format*. Unlike *partial import*, a completely new report with all information is created.
Link	Short for hyperlink, linking, cross-reference: reference from one website to another website or to another spot within the same website.
Look-up	Unfolding additional web browser window for easy selection of field entries.
Monitoring plan	Describes the procedure for monitoring and reporting annual CO_2 emissions or tonne-kilometre data of an *aircraft fleet*. The monitoring plan is the basis for compiling an *emissions* or a *tonne-kilometre report*.
Partial import	Provides a supplementary import of detailed data for an already existing report. Data sets are not fully *imported*. Partial import only affects "air fleet", "non-ICAO airports" and "transport services" or "emissions" *forms*.
Password	It must consist of at least eight characters and contain at least one special character and one number. It is not case-sensitive.
PDF	Portable Document Format
Pop-up blocker	Program that prevents the undesirable unfolding of additional browser windows, in this case *look-ups*.
Registration	The input of personal data to create a *user account*
Report	Description of emissions-related data of an *aircraft operator* during the reporting year.
Role	*User role*
Selection list	A list that is available to select data for input; for instance catalogues for the *ICAO code*, *aircraft fleet* and so on are saved in the software.

Syntax	A file name‘s structure when generating *PDF* and *XML files*.
Tonne-kilometre report	See *Report*
Tooltip	Small window of a graphical user interface which contains additional information or advice (in this case about the input fields).
User account	Access rights, for example, for a computer or software consisting of *user ID* and password.
User ID	User name: the *user account*’s part that can be freely selected
User role	There are various groups of software users according to the distribution of tasks when creating a *report*. Possible roles are "operator" and "expert" which can be allocated to the user during *registration*. The executable software functions differ depending on the selected user role.
Verifier	Expert pursuant to § 5(3) TEHG who assumes the detailed examination of *reports*; Approved verifiers are announced by *DEHSt*.
VPS	Abbreviation of the German term for Virtual Post Office; The Virtual Post Office is used to transfer encrypted and signed messages between *operators* and *verifiers* and the Authority.
Web browser	Program to display web pages (HTML code)
Wildcard	Placeholders for other characters; For example, asterisk *, percent sign %, question mark ? used in search fields.
XML	Extensible Markup Language; Meta-language for creating structured documents, a characteristic of XML is the separate display of content and formatting.
XML file	A file in *XML format*; The reporting software uses the XML format for data exchange with other systems.
XML interface	Communication option for data exchange between different programs in *XML format*; defined by an interface description.
ZIP file	File that contains one or more files compressed using a compression program. The resulting file has the "zip" extension.

Index

A

Aircraft fleet....31
Aircraft operator....8, 9
Alias....11
Allocation application: Delete....20

B

Button....20, 23, 32, 33

C

Check window....42
Cookie....7
Copy: Airport....32
Copy departure/landing site....33

D

Data browser....15, 39
Data input....21
Data Input....5, 6
Data security....7
Data set....30, 32
Data set: Capturing....32
Data set: Edit....33
Directory tree....41
Document....42
Document: Attach....42

E

Editing rights....15
Editing rights: Exclusive....26
Editing rights: Transfer....12, 26, 40
E-mail program....6
Emissions report: Create....15, 29
Export: Saving locally....24

F

Filter....31, 40
Form....29
Form: Delete....41
Fuel....29, 34

I

ICAO: ICAO Code....29, 31
ICAO: Non-ICAO airports....34
Import....15, 25, 41
Import: Partial import....34
Interfaces....21, 25
Interfaces: PDF....22
Interfaces: XML....24, 25, 34

L

Language selection....14
Language selection: Language....25, 29
Login....13, 39
Login page....14, 39
Logout: automatic....21

M

Mandatory field....21, 42
Monitoring plan: Selection....28, 39

O

Operator....8, 9

P

Partial Import....34, 41
Password....11, 12, 39
PDF file....6, 25, 37
Process flow....8

R

Registration....12, 39
Report....5, 8
Report: Check....21, 36
Report: Complete....21, 29
Report: Create....25, 27
Report: Export....24
Report: Import....25, 41
Report: Partial imports....34
Report: Select....15
Report: Submit....35, 38
Report: Technical issues....5
Report: Transfer....26
Report: Verify....37

S

Save....6, 41
Search....30, 32
Selection lists....7
Start page....6, 15
Submenu....18, 41
Summary forms....42

T

Tabular forms: Tabular display....29, 40
Toolbar....20, 23, 31, 33
Tooltip....7, 21, 29, 40

U

User account....11, 15, 39
User account: Edit....12
User account: Set-up....11
User ID....13, 39
User Role....9

V

Validation check 29
Verification 37
Verifier 8, 9
Virtual Post Office 8

W

Web browser 6
Web Browser 5
Web browser: Settings 7

X

XML export 24
XML file 25, 34

Z

ZIP file 25, 37

German Emissions Trading Authority (DEHSt) at the Federal Environment Agency
Bismarckplatz 1
D-14193 Berlin

www.dehst.de/EN | emissionstrading@dehst.de